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ORIGINAL ARTICLES.

A FEW MORE REMARKS ON DERMATITIS HERPETIFORMIS.

Read in the Section of Dermatology and Syphilography, at the Forty-first Annual Meeting of the American Medical Association, Nashville, Tenn, May, 1890.

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OF CINCINNATI, O.

Since Duhring, in 1884, called the attention of dermatologists to a group of eruptions of the skin under the name of dermatitis herpetiformis, interest in these eruptions has greatly increased, because many affections of this kind could find their right nosological place in dermatology. Many of these cases were formerly confounded with erythema multiformis, others with herpes iris, others with pemphigus; impetigo herpetiformis hebræ remaining a peculiar eruption out of any definite nosological class. As the bulla was characteristic of pemphigus, so every bullous eruption was characterized as such, and on account of the pruritus, the adjective of pruriginosus was added. Duhring's work consisted in definitely establishing the general symptoms which constitute the type of these eruptions and thus refer them all to one group.

1. Polymorphism of the eruption.
2. Paresthesia.
3. Chronic course and relapse.
4. Relative general good feeling.

Certainly the disease is not a new one, for we find many descriptions of eruptive diseases of this kind scattered in the books of different authors, and called with different names. To-day these various eruptions are to be referred to this type dermatitis herpetiformis. So we find herpes phlyctænoides in Chansit, 1852; pemphigus circinatus in Rayer, 1828; pemphigus chronicus in Racle, jr., 1841; pemphigus compositus, herpes pemphigoides oder pemphigus herpetiformis in Devergie.

Cazenav[1] had already remarked that pemphigus sometimes is accompanied with different eruptions like herpes and prurigo, and in this case the affection is like to pompholix pruriginosus willan, where the patient is troubled with itching and burning sensation. In these cases small vesicles are mixed with large bullæ aggregated into groups, resembling herpes phlyctenoides, while large bullæ of pemphigus are scattered on the cutaneous surface.

In Bazin, under the article "Arthritides Bullosæ," we find a description of two varieties of bullous eruptions, viz., pemphigus arthriticus and hydroa bullosa, where he includes all the symptoms of dermatitis herpetiformis.

Auspitz,[2] under the head of "Neuritic Dermatoses," established a group of eruptions which he named inflammatory trophoneuroses with a cyclic course. He gave to this class of eruptions the generical name of erythanthema, which he divided in two families, viz., those affecting the skin superficially and those affecting the skin deeply. He divided the last family in species vesicular, pustular and bullous, including herpes circinatus, iris, annulatus, herpes phlyctænoides, herpes impetiginosus and pemphigoides. As herpes impetiginosus he understood the disease described by Hebra as impetigo herpetiformis.

It would be superfluous for me in the brief space allowed to go on to review or recall all the authors who before Duhring described cases of this disease under one name or another, but I must refer the reader to the beautiful and complete work of L. Brocq on "Dermatitis Herpetiformis Duhring." Brocq differs with Duhring as regards the name and prefers *dermatitis polymorpha pruriginosa chronica a poussèes successives.* It is a question of nomenclature, but the form remains the same, and we must be grateful to Duhring for having traced the principal symptoms which form the characteristics of this peculiar affection. The name of "dermatitis, inflammatio cutis," inflammation of the skin, seems to be rightly applied, as vesicles and bullæ are situated in a red halo, and this redness precedes the spreading of the eruption. The adjective herpetiformis gives the idea of vesicles with a tendency to aggregation.

There is no question that one of the most remarkable characteristics of this affection is the disposition to relapse, when a spot is nearly healed up a new crop of vesicles or bullæ comes up again. The genius of relapsing is so charac-

[1] Abregié, Pratique des Maladies de la Pean, 1847.

[2] System dur Hautkrankheiten, Wien, 1881.

teristic of this affection that, as Unna remarked,[3] the cases referred to by Brocq, where no relapse had been seen, ought to be excluded from this group.

Paresthesia, perversion of the sense of touch is the dominant symptom in this disease. The patient complains of an itching and burning sensation together, which often prevents him from sleeping and obliges him to scratch his thick and infiltrated skin. This symptom is so important as to distinguish a case of dermatitis herpetiformis from a case of true pemphigus. The restlessness and the continous scratching of the patient affected with this disease contrasts a great deal with the quietness and the dread of changing position in the patient affected with true pemphigus. According to Unna pemphigus prurigino sus is to be taken out of the group pemphigus and is to be comprehended in the group dermatitis herpetiformis. The perversion of the sense of touch revealed by the itching, shows the disorder in the sensitive nerves, which is the *causa proxima* of this disease.

Polymorphism of the exanthema forms another characteristic of the disease. Papules, vesicles, bullæ and pustules are found together in a striking way; but we can assert that the predominant feature is the vesicle and the bulla. I seldom saw a true pustule, but mostly are vesicles or bullæ filled with a turbid and purulent exudation. This remark has been already made by Brocq.

The condition of the general health maintained in this disease must be considered only as relative. The patient does not lose his appetite, but on account of the itching sensation loses a great deal of his sleep, and in some cases wastes away considerably.

To give a practical example I will take the liberty of reporting as briefly as possible a case of dermatitis herpetiformis, which I had the opportunity to study from its very beginning.

A gentleman, N. S., 53 years old, in the best of health, who never had any disease of any consequence, in very good financial condition, called in April, 1889, upon me complaining of an itching sensation all over his body, but more intense on the chest and on the arms. The skin white and smooth, was covered with an abundant panniculus adiposus and did not show anything with the exception of a few small red maculæ in the middle of the chest. A mild alcoholic solution of carbolic acid was prescribed for the purpose of diminishing the itching sensation. A few days after the patient came back complaining that the itching sensation was always more intense and at this time small papules like in eczema papulosum were scattered on the chest and on the shoulders. Under the impression that I had to do with an eczema papulosum a salve consisting of oxid. zinc, subnitrate bismuth, carbolic acid and vaseline was given to be rubbed on the eruption. A few days after a papular eruption was spreading all over the body and on the limbs. The skin was red and the papules some were small, of the size of a grain of millet, and some larger and polyginal in shape, and depressed in the centre, resembling exactly the papules of lichen ruber-planus. At this time I had the idea that the case was one of lichen ruber scarlatiniformis. I prescribed then Asiatic pills from two to four a day, and bath with water where some wheat bran had been boiled, assuring the patient that in a few months everything would return in the normal condition. From this time I did not see the patient. Three months after I was called in consultation to see the same gentlemen. All his body was covered with bullæ filled up with clear serum ranging in size from that of a pea to that of a hen egg. Where the bullæ were broken, large excoriations remained. In the places where bullæ had already healed up the skin was dark brown in color, thickened, and large flattened papules were raised above the level of the skin. Bullæ were also coming on the mucous membrane of the lips, of the mouth and of the throat. These bullæ soon broke, leaving excoriations. The patient was extremely nervous and excitable, but his appetite was relatively maintained, and he could take a sufficient quantity of nourishment. The patient would get better from time to time, his excoriations would heal to a considerable extent, and we would all begin to hope for recovery, but relapse was sure to occur, and always preceded by slight elevation in temperature. At one time the whole body was one sore, bed clothing and everything stuck together. We feared reabsorption and it was deemed necessary to put the patient in a continuous bath. This, however, could only be used at intervals as the patient complained of chilliness, and it was necessary to have the water at the temperature of 98° F., which made him weak and produced congestion in the circulation of the brain. The continuous bath, in spite of all the difficulties, acted very satisfactorily. The eruption of new bullæ subsided and the extensive excoriations healed up considerably in about three weeks' time. But after three weeks we were obliged to quit the bath because this chill was so bad that the patient could not stand any more. The patient was now anointed with different salves, vaseline and salicylic acid, olive oil and carbolic acid, always in very mild proportions. New bullæ continued to appear, became rapidly purulent and the patient began to show symptoms of pyæmia. Fever ranged between 101° to 103°, pulse very weak and over 120, and his life was in great danger. Abundant doses of quinine reduced the temperature and the large discharging sores were

[3] Ueber die Duhringshe Krankheit und eine neue Form derselben. Monatshefte für Pract. Derm , B. ix, No. 3.

dusted with iodoform powder, covered then with iodoform gauze. This treatment helped, the fever disappeared, the excoriations gradually healed up, so that the patient was able to get up and go out riding. When I left the patient he was almost well. No new bullæ were coming, and there remained only some itching sensation. His sleep was pretty good, appetite excellent. He wished to go to some resort and he chose Old Point Comfort.

I must remark some peculiar features of the general symptoms. The urine had been carefully examined every few days and it was found always of a normal acid reaction, never could any trace of albumen be detected, urates and phosphates were somewhat in excess. The most interesting symptoms were revealed in the nervous system. At times the gentleman was somewhat stupid, taking but little interest in surrounding things, at times he was irritable, and for some time was slightly delirious during the night.

His sleep was very agitated, he slept a few minutes at a time and no hypnotic could give him a few hours of rest. Night-sweats were very profuse, especially lately, when he was improving.

In order to give a complete account of the case it must be noted that the gentleman had another relapse at Old Point Comfort. He was not satisfied with the treatment and left for Philadelphia, where he went under the treatment of Duhring. From Philadelphia he went to New York, having another relapse, and he put himself under the treatment of Elliot and Bulkley. He came back to Cincinnati with still another relapse, and is now again under my charge.

It will be seen that the general feeling of well-being which is said to be characteristic of this disease is to be taken with a grain of salt; that, indeed, there are many interesting symptoms affecting the general health and more especially the nervous system.

In the beginning I called this case pemphigus pruriginosus, and I find that it has some likeness to the case lately published by Dr. Henry G. Piffard[4] under this same name. However, I do not see any reason for leaving these cases separated when we can refer to one group of diseases which have the same symptoms in common and have nothing to do with real pemphigus.

I wish now to call your attention to another case of the same kind in which the eruption runs an exceedingly chronic course and has a kind of progressive way of spreading over the skin by continuity.

This is a lady, Mrs. X. Z., 57 years old, who has always enjoyed good health; she is five feet tall, 170 lbs. in weight, fleshy. Her skin is very white and delicate, ponniculus adiposus abundant. She has been always in very good financial condition, belonged to the highest society. Four years ago she lost her husband under the saddest conditions. After the death of her husband many investments were found to be valueless. The loss of her husband and the financial troubles threw her into deep grief. About three years ago there appeared on the index of the left hand an eruption in form of vesicles filled up with purulent matter. The eruption slowly spread over the back of the hand for a time then stopped, but the skin remained thick and of a brownish violet color. A few months after which an eruption of vesicles appeared on the lips, around the ears and on the temporal regions, the toes and the back of the right foot. At this time I was called in consultation by her family physician. The surface was completely covered with thick, yellow brownish crusts, having the appearance of an eczema impetiginosum. After removing the crusts with applications of olive oil, the surface was found to be covered with large spots having in the center a dark brown color, with kind of papules and pustules scattered, and in the periphery deep excoriations in semicircular disposition; itching and burning sensation accompanied the eruption. Still under the impression that I had a case of eczema to deal with I applied unguentum diachylon hebræ spread on muslin. The result of this application was not satisfactory, as it brought out many more vesicles which were easily broken and left the surface more excoriated. The disease spread upon the periphery of the placques, in the form of vesicles upon an inflammatory halo.

Vesicles and pustules of the size of a millet seed appeared on the tongue, and on the mucous membrane of the mouth and of the nose. These soon broke, causing serous discharges from the mouth and from the nose.

At this time a mild salve of resorcin was used (half drachm in one ounce of vaseline), but the burning caused thereby was so great that it was necessary to stop its application immediately. Internally, Fowler's arsenic solution, in doses from ten to fifteen drops a day, was prescribed. New conglomerated vesicles were continually developing at the edges, and forming semicircles. The epidermis covering the vesicles was easily removed, leaving the excoriations in form of crescents, extending on the parietal region. Another spot developed in the same way on the occipital region, running downward on the back of the neck. Every active remedy had proved unsatisfactory, increasing the irritation and bringing out new crops of vesicles, so we resorted to indifferent means, so as only to cover the skin and protect it from the contact of the air. The surface discharged a great quantity of serous fluid, which stuck the hair together, took an offensive smell, irritated the healthy skin with which it came in contact, and caused an unbearable itching sensation. The surface, therefore, was washed

[4] Journal of Cutan. and Gen.-Urin. Diseases, New York, April, 1890.

twice a day with a mild solution of carbolic acid, and after having been dried as well as possible, a salve containing subnitrate of bismuth, oxyd. zinc, in the proportion of half drachm to one ounce of vaseline, with ten drops of carbolic acid, was applied with a brush. In this way the inflammation diminished and the excoriations healed up. The surface of the skin, however, remained highly pigmented, showing a dark brownish color, and because of abundant granulations it presented flat papules similar to those seen in impetigo herpetiformis.[5]

The affection was now at a kind of standstill. The excoriations remained in great part healed up, the discharge of serum nearly stopped. Once in a while a few small vesicles would appear on the old affected spots. As it was in summer time, the patient thought that if she went to some watering-place she might derive some benefit from the change of climate. I therefore lost sight of the patient for about nine months. I must express my thanks to Dr. Jos. Ransohoff, who called me again to see the case.

The eruption at this time had affected the forehead, the eyebrows, the eyelids, the nose, both cheeks, lips and chin, extended over the whole neck, down upon the breast and backwards on the shoulders, representing exactly a lace fichu. The skin was dark brownish-red, slightly swollen, with large flat papules, lighter in color, raised above the level of the normal skin. At times crops of small, miliariform vesicles and pustules appeared, scattered over this affected skin. The edges were raised above the level of the skin, show an uninterrupted row of vesicles, whitish, pulpous, from the size of a millet seed to that of a split pea, on a red, inflamed halo, which is extended upon the healthy skin. The whole resembles to some extent a burn produced by hot water. The slightest contact or rubbing removed the epidermis, and left an excoriation in semicircular form, neatly cut as if it had been done with a penknife. The itching sensation was unbearable, but the general health of the lady was relatively good; appetite and digestion good, and bowels regular. Sleep was disturbed by the itching sensation, but in spite of it the lady got some rest at night at intervals.

It is worthy of remark that at each new eruption the patient complained of some chilly sensation towards evening, and when the eruption was spreading so badly she had also some fever. New spots are now coming, one in the middle of the breast and one under the axilla. A small bulla of the size of a pea is the beginning, and this soon dries up, forming a slight brownish crust, then vesicles appear around the first, forming the spot, which grows and spreads regularly.

At present I am treating the patient with only ichthyol. She takes from thirty to forty drops of ammon. sulph. icht. a day internally, and externally I paint the surface with a lotion of ichthyol, aqua rosæ and glycerine, equal parts. At first it caused some burning sensation, but soon it diminished. The itching sensation has diminished a great deal and the swelling is going down. Few new vesicles and pustules are coming and the old papules are slowly diminishing. The edges are still excoriated and discharging sero-purulent matter. The face is covered with paste zinci mollis with ichthyol, according to Unna.

Looking over the literature of this disease, I find that there is an analogy between my case and a few cases which have been reported by Brocq in his "Dermatitis Polymorpha Pruriginosa Chronica a pousseès Successives," varietas gravis. The first, No. 29, from Dr. Saddler, the eruption, spreading slowly, covered the whole body and had a fatal end. Two other cases under the numbers 31 and 32, the first from Bazin and the second from Rayer, have a great likeness to the case under consideration.

The cause of this disease is still in darkness, but without doubt it lies in alteration of the nervous system, as is the case in herpes zoster. The disease is not contagious, the fluid of the vesicles inoculated in rabbits has never given any result. The lady patient, of a very irritable nature, suffered for years under great grief. The moral trouble may have influenced her nervous system.

Brocq would not grant so great an influence to moral impressions, but would rather attribute the cause to an arthritic diathesis. In both our patients there was no sign whatever of rheumatic diathesis, although both were used to very high living. I return to my first idea, that the cause of the disease is to be found in the nervous system, which opinion is also maintained by Bulkley, Livering, Alfred Wiltshire and Wyndham Cottle for herpes gestationis.

The first symptom of this disease consists in the perversion of the sense of touch, paræsthesia, itching sensation, which shows that the sensitive nerves of the skin are affected. The itching and burning sensation in some cases is limited to the place of the skin which is affected, in others is spread all over the body. The patient cannot stand the pruritus, and scratches his skin to get some relief from his troublesome sensation. In our first patient the itching sensation was spread all over the body, but in the lady this was limited to the affected places, and preceded the new eruptive placques. It seems that the paræsthesia is the symptom which speaks most for an alteration of the nervous system. If the itching sensation follows the eruption, then it must be believed that the infiltration and the anatomical alterations in the texture of the skin were the cause of the pruritus, but in our cases itching sensation was the first symptom, and preceded every eruption.

[5] Hence the name given by Auspitz: herpes vegetans. Archiv. s. Dermatologie, 1868.

The form of the eruption differs according to the variety of dermatitis herpetiformis. In a general way we may say that it begins with erythematous placques, which run into papules, or the epidermis is filled up with serous fluid in form of vesicles and bullæ, or with purulent exudation, vesicopustules and pustules. The texture of the skin is considerably altered, it remains infiltrated, thick, hard, highly pigmented and congested, of a brownish-violet color. In consequence of the vesicles, the bullæ and of the pustules, excoriations and crusts remain on the diseased skin. In the lady we found a considerable swelling and acute œdema of the eyelids and of the face when the eruption spread on this region.

The color of the erythematous placques in the beginning is red purplish, and disappears somewhat under the pressure of the finger, and has nothing to do with the brownish-violet color, which we find in the infiltrated placques where the eruption had its seat. The spreading of the eruption is different in the various cases. In our first case the bullæ appeared all over in large bunches, affecting one day the genital and the gluteal region, another day the limbs and the chest, and so on until the whole body was covered with bullæ. In the second case, however, the disease spread with the greatest regularity and the new eruption appeared on the edges, while at times relapses of pustules and vesicles occurred, scattered irregularly on the old infiltrated spots.

In a recent relapse in the first case, we can notice small reddish papules surmounted by small vesicles, of the size of a pin head, aggregated together like sudamina, spread over large regions of the body, while small pustules are scattered on the limbs. In the second case the vesicles are no larger than a millet grain to a split pea, brilliant like pearls, disposed in circles on the edge of the spot. The vesicles are easily broken, and the slightest contact removes the epidermis in form of shreds, leaving the corium uncovered. It is remarkable that any irritation, or any pressure is liable to bring out a new crop of vesicles. Vesicles come often on the occipital region which rests on the pillow. Just in the middle of the breast, where the springs of the corset rub, a new placque is now coming. Another placque of numerous vesicles is now formed under the armpit, where the two surfaces of the skin come in contact. Vesicobullæ are frequently developed on the tip of the fingers of the right hand from any attempt to sew or stick a pin, or button her clothes.

Comparing the two cases, we see that both are of long duration, but in the first we see a kind of tendency to acuteness, while in the second we see a tendency to chronicity. In the first, in each relapse there is a stormy appearance of vesicles and bullæ, while in the second we see the vesicles slowly formed and slowly but surely progressing.

I cannot say much about the duration of the disease. Both our patients are improving, their general health is pretty good, appetite maintained, digestion fair, bowels moved regularly. The pulse is good, the heart in normal condition, no remarkable change in the chemical constitution of the urine. The patients did not lose much in their weight, and everything shows that the principal functions are in complete order. This removes any idea of fear for the life of the patients at present. The patients from Bazin and Bulkley were permanently cured. This encourages us, and we hope for the best.

What about treatment? While I was reporting the clinical history of the cases I told what we were administering to our patients. A great many remedies have already been tried, but all without satisfactory result. Milk diet, alkalines, purgative mineral waters, tartrate of potassium, arsenic, iodide of iron, tonics, strychnia, belladonna, atropia, cinchonidia, ergotine, tincture cantharides, iodide of potassium, etc.

Iodide of potassium has been already condemned. In some cases the arsenide of soda seems to have done good, especially Hutchinson claims great benefit from it. In both our cases we found arsenic of no account, if not pernicious. Fluid extract of ergot seems to have been of some benefit in our first case, but did not seem to have been of any benefit in our second case. I am actually trying internally ichthyol in the lady, and we can say that it has been useful, as she is somewhat better. She takes sixty drops a day in three doses.

Externally we can say that we have applied everything which can be found in the dermatological formulary. Unguent diachyl. hebræ, ung. zinc. benzoat, unguent resorcin, aristol, oleate of bismuth, oil and carbolic acid, liniment oleo calcarium, covered with cotton, baths with amylum, powders, etc.; but all without satisfactory result. I must remark that every time that unguent diachylon has been applied, more vesicles have come out. It seems to me that any slight irritant means applied on the skin, has increased the fury of the disease. I must state that I am treating the lady now with ichthyol. For the face, neck and shoulders I am using gelatine zinci mollis with 2 per cent. of ichthyol. This has calmed the burning sensation. The itching is not so intense. The papules are flattened, and no new vesicles or pustules are coming on the affected places. The raw edges covered with this gelatine do not cause pain, and in some places are healing up. I think that this paste has given me more satisfaction than any other remedy used. For the breast I am using now ichthyol, aq. ros. and glycerine, equal parts, does not irritate, many excoriations have healed up, and I feel encouraged to keep on in its use.

In our first patient while under the treatment of Elliot also, ichthyol has been used in association with aq. calcis and oil of sweet almonds, and the patient improved considerably.

It seems to me that ichthyol has a peculiar sedative influence upon the final nervous ramifications. In several cases of pruritus, it has stopped the itching sensation, when every other remedy had failed. In many cases of nervous eczema, especially in children, a lotion of

Ammon. sulphoichthyol, ʒij.
Aq. ros.,
Glycerine, āā ʒss.

has given very satisfactory results. In the lady patient referred to, when any indifferent application caused burning, and eruption of new vesicles, ichthyol does not produce discomfort, diminishes the itching, and the excoriations, under the dark cover of the ichthyol, seem to heal up faster.

A well regulated diet is strictly necessary in the treatment of this disease. Our patient is now on an exclusive milk diet. Coffee, tea, wines and liquors are strictly forbidden.

Anything which is capable of producing erythema or urticaria, like strawberries, clams, lobsters, etc., must be avoided. Meat alimentation must be greatly reduced. The most digestible food must be selected. The bowels must be carefully watched and regulated accordingly.

With this case we have obtained some improvement of this interesting, proteiformis disease, which I dare to call "Dermatitis Herpetiformis Progressiva."

INSTRUMENTS AND APPLIANCES FOR THE ADMINISTRATION OF OXYGEN.

Exhibited before the Philadelphia County Medical Society, October 22, 1890.

BY JOHN AULDE, M.D.,
OF PHILADELPHIA, PA.

Having long entertained a favorable opinion of oxygen, it occurred to me some time ago that it would be of some interest to the members of this society if an opportunity were afforded for examining the various instruments and appliances for its exhibition. I have, therefore, made a collection of the different instruments which are now on the market, and shall endeavor to point out briefly the manner in which they are to be used in the treatment of disease. This agent has attracted considerable attention, more especially within the past five years, although ten years ago it would probably have been considered rank quackery to favor the use of oxygen. The large number of favorable reports which have recently appeared in medical literature furnish sufficient evidence to warrant us in making an effort to become more familiar with its advantages. My remarks this evening will be devoted exclusively to a description of the apparatus, dealing only incidentally with the therapeutical indications.

The first instrument which I show you is that manufactured by the White Dental Manufacturing Company, of this city. The gas is supplied in cylinders containing 40 and 100 gallons, respectively; and attached to the cylinder we have a cloth-covered rubber bag which serves the purpose of a reservoir, so that only a small portion of the gas escapes, and thus the quantity inhaled can be measured. Attached to the inhaler, and forming a part of the apparatus, is a bottle partly filled with water, and as the patient inhales the gas, it passes through this water, and then enters the pulmonary tissues in the form of moist oxygen; it can be taken pure or mixed with atmospheric air, and unless the patient inhales the gas too rapidly no bad effects follow its administration. When properly practiced, inhalations of the gas have rather a pleasant and agreeable effect, and the only danger from rapid inhalations is that which would follow rapid breathing under any circumstances. The value of the muscular exercise in the procedure is an item which should be considered. (Fig. 1.)

The next apparatus to which I call your attention is made by the same manufacturers, and is intended for the exhibition of the gas by enemata, when for any reason its administration by inhalation cannot be practiced, or when, as in the case of typhoid fever we desire to obtain the more immediate effect of the gas upon the diseased structures. This apparatus consists essentially of two parts, connected with each other by means of rubber tubing. The one is a closed copper vessel, while the other is open, and the gas is forced into the rectum by the pressure of the water in the open vessel, the closed receptacle having first been filled with water, and connected with the cylinder until all the water had been displaced. This is a useful combination; but in the absence of the apparatus, the gas can be introduced into a bag, and pressure made upon it, when the gas will be forced into the lower bowel. In the present instance, the pressure is regulated by the height to which the open vessel containing the water is raised. (Fig. 2.)

A few years ago, I read with great interest an account of some experiments conducted by Dr. Kellogg, of Battle Creek, Michigan, upon guinea-pigs, by means of the rectal insufflation of oxygen gas. He found that, on opening the abdomen and isolating a loop of the mesentery, the introduction of the gas into the rectum caused the blood circulating in the veins to change to the arterial hue; on withdrawing the gas, the blood at once assumed the venous hue. These, and other experiments, go to show that the blood readily takes up oxygen and distributes it to the tissues, thus favoring combustion, but there never have been any demonstrations made to prove that the use of this gas would cause increased combustion and abnormal waste of the tissues through hyperoxygenation.

These cylinders are furnished by the manu-

facturers containing either pure oxygen gas or a mixture of oxygen in combination with nitrous oxide (nitrogen monoxide.) This gas, as you know, is used by dentists and surgeons for the production of anæsthesia, but when so used it is administered in concentrated form; when diluted, it acts as an exhilarant, and I presume it partakes of both these characters when combined with oxygen, and a considerable quantity slowly inhaled. It certainly has a quieting effect upon the nervous system, and often is far superior to the pure gas, or that diluted with atmospheric air.

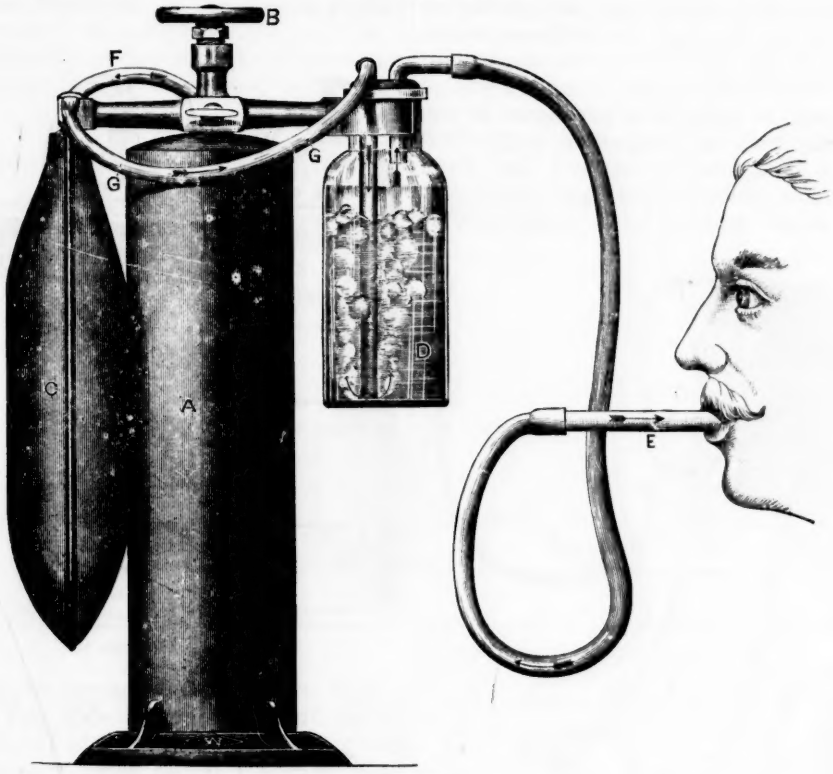

FIGURE 1.

The apparatus shown here is that manufactured by the Walton Company, of New York; the cylinder contains one hundred gallons of compressed gas, two-thirds being pure oxygen, and one-third nitrous oxide. The inhaler is in the form of a bottle half-filled with water, and this is connected with the cylinder by a small rubber tube, which, with the glass tube in the inhaler, carries the gas to the bottom, when it makes its escape in the form of bubbles, as shown when I turn the stop-cock. In using this instrument, the patient or an attendant turns the stop-cock, allowing the gas to escape, when the patient inhales freely by deep inspiration, and the gas is immediately turned off. This operation is repeated a number of times during a *séance*, according to the directions of the physician. It is claimed that when the gas is used in this manner, directly from the cylinder, better results follow, on the supposition that the gas still retains some of its expansive force (due to compression) after reaching the lung structures, but this is doubtful. (Fig. 3.)

It not infrequently happens that we wish to send gas to our patient, or it may be demanded in the case of an emergency, and in such instances the gas can be drawn from the cylinder, collected in a cloth-covered rubber bag made for the purpose, and transported any reasonable distance. It is then at the command of the physician, and can be used by the nurse as required. The bag which I show you will hold ten gallons, and this usually will be quite sufficient for a day, when the container must be thoroughly washed with a solution of alcohol and water, in order to remove any impurities which may occur from the action of the gas upon the rubber lining of the bag.

The instruments which I have thus far exhibited require that the physician should purchase gas, but that which I now show you is a machine that I have had in use for several years, which enables the physician to make pure oxygen gas, which can be stored in a small office gasometer, or it can be used or distributed among patients in cloth-covered rubber bags such as I have exhibited. This is the oxygen generator introduced to the medical profession some years ago by Dr. Wallian, of New York, and is very complete,

and, withal, convenient for office use. The mixture of chlorate of potassium and binoxide of manganese is placed in the retort, and under this retort I now place a spirit-lamp constructed on the same principle as the argand burner. In a few minutes you will observe that the gas begins to form and passes through the different wash-bottles, and is finally collected in the rubber bag. The mixture from which the gas is made contains about seven parts of chlorate of potassium to one part of the binoxide of manganese, and in this proportion but little heat is required, and from ten to twenty-five gallons of pure gas can be prepared in as many minutes at a comparatively mall cost.

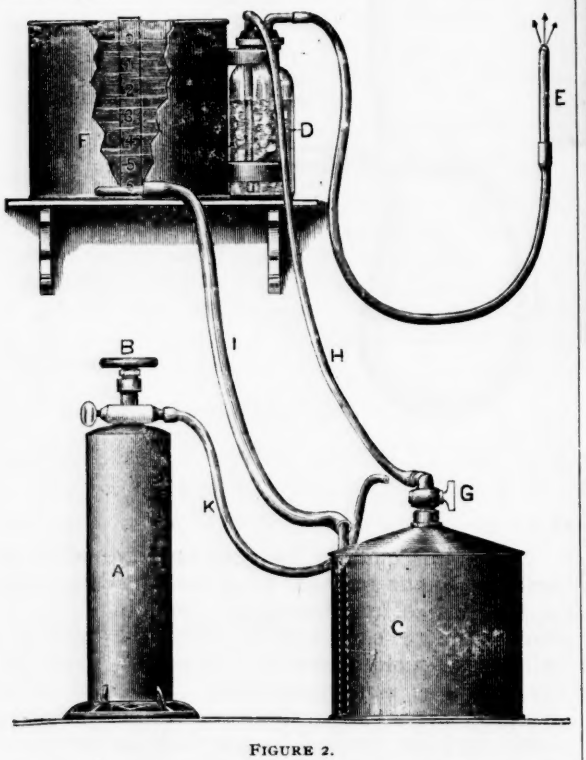

FIGURE 2.

In order to purify it, the gas is first passed through a solution of caustic soda, two bottles, and is next carried through a weak solution of nitrate of silver, and later through pure water. Ordinarily one would suppose that the gas would then be free from all impurities, but this is not the case, as it has been found on examination that gas thus prepared contains a minute quantity of chlorate of potash, and, in order to prevent this from passing over, it is necessary to pass the gas through a moderately thick layer of absorbent cotton. The presence of crystals of this substance has been demonstrated in cotton so used, after a considerable quantity of the gas had been allowed to pass through.

This machine I have found of service in the treatment of emergency cases, where oxygen was indicated, and although the first cost is greater than when compressed gas is used, I have no doubt but that the general practitioner could frequently use it to advantage, as it is simple in construction, and made in a substantial manner. (Fig. 4.)

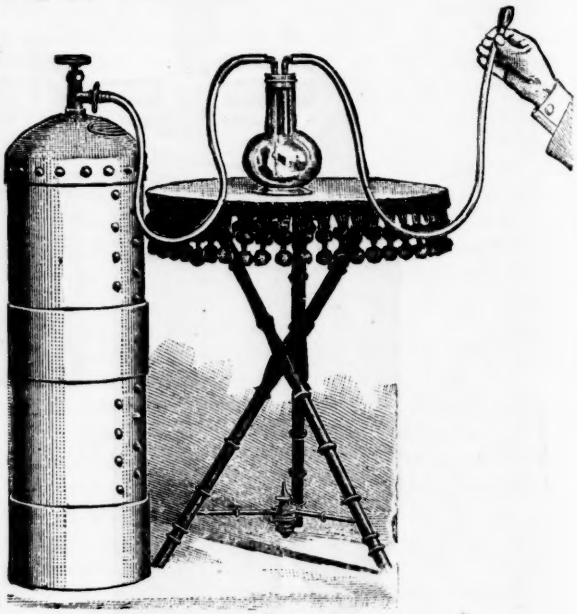

FIGURE 3.

You are aware that nascent oxygen can be obtained from hydrogen dioxide, and I desire therefore to call your attention to the form of an inhaler which I began using a number of years since, before I had the advantages afforded by a generator. It is a plan which can be utilized for those living at a distance from the physician's

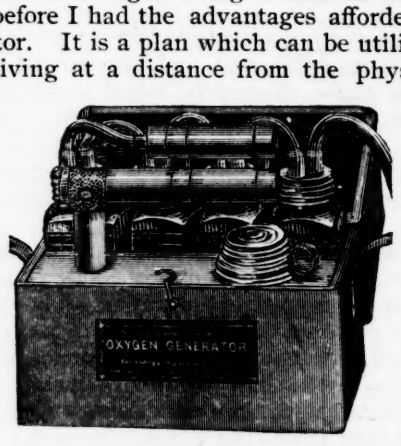

FIGURE 4.

office, or in the absence of the gas itself it may often be employed with much benefit. The inhaler, filled about one-third full of warm water, is placed in a quart tin cup, and a tablespoonful, more or less, of the solution of the peroxide of hydrogen placed in it, when nascent oxygen begins to be given off, and the patient inhales by using the mouthpiece.

Sometime ago, in the preparation of an article on "Creasote" (*Notes on New Remedies*, October, 1890), I took occasion to refer to a very excellent apparatus, kindly loaned to me by Lehn & Fink, of New York, and the invention of Dr. Daywalt, of San Francisco, for inhalations of that drug. It appeared so complete in detail that I could not withstand the temptation to present it for your consideration as a suitable inhaler for

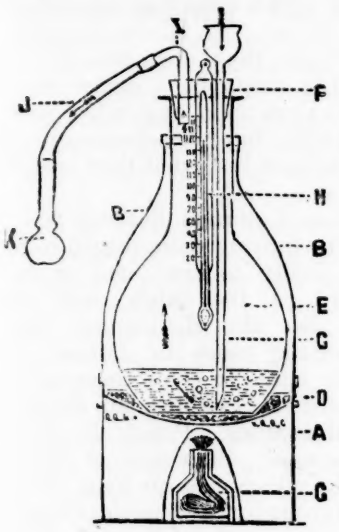

FIGURE 5.

the peroxide of hydrogen. The bottle in which the solution is placed is exposed on a sand-bath, which is heated by an alcohol lamp. The special advantage to be gained from the use of this instrument is due to the fact that we have a constant record of the temperature, a suitable thermometer being so adjusted in the cork that it reaches the liquid at the bottom while the mercury is in full view. (Fig. 5.)

Peroxide of hydrogen is also of service when employed as an antiseptic, and is of special value when there is a breaking down of tissue with the formation of pus. A small quantity of the usual fifteen-volume solution may be used in the local treatment of boils and carbuncles, or it may be used by patients suffering from uterine and vaginal affections by means of a tampon saturated with the solution and introduced into a gelatin capsule (veterinary size). A tampon prepared in this manner may be allowed to remain *in situ* over night, followed by the free use of hot water.

There is no instrument which offers to us such a wide range of application for the peroxide of hydrogen as this ingeniously constructed apparatus placed on the market by Marchand, of New York. It is not only an atomizer, but also a vaporizer, and is so well adapted for local employment of this valuable remedy that it merits more than a passing notice. Throat, nasal, and bronchial troubles are so common that the physician will find himself behind the times who fails to take advantage of the benefits to be derived from the local employment of the peroxide by means of the atomizer and spray. Being perfectly harmless to the most delicate tissues, and wholly free from objectionable characteristics as regards taste and smell, both the spray and vapor can be liberally used in the treatment of all forms of diphtheria, croup, and beginning quinsy, with the best prospects of success. (Figs. 6 to 7).

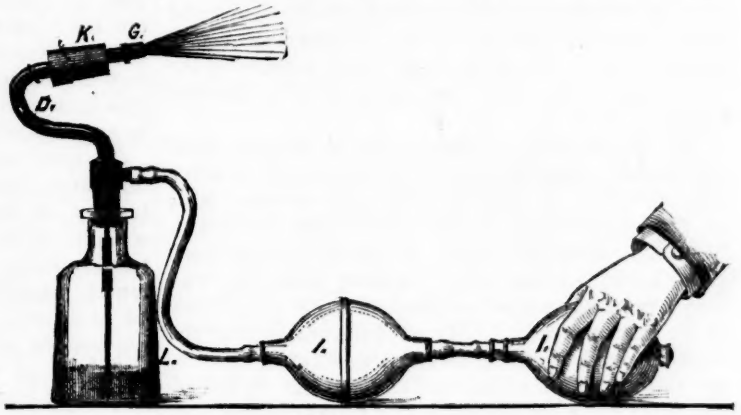

FIGURE 6.

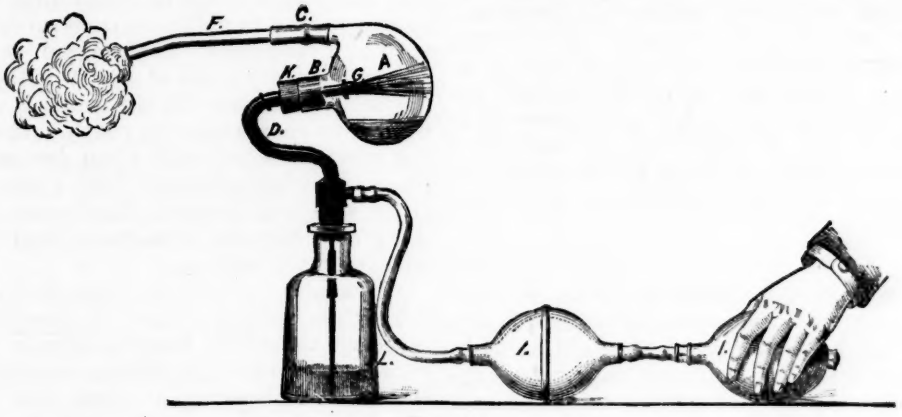

FIGURE 7.

DISCUSSION.

DR. S. SOLIS-COHEN: I take exception to the remark of Dr. Aulde that ten years ago, the use of oxygen would have been looked upon as quackery. I am sorry that, in speaking of peroxide of hydrogen, Dr. Aulde did not speak of ozonic ether, which was introduced by the same man who has given nearly all that has been of service in recent years—Dr. Benjamin Ward Richardson. It is an etheral solution of H^2O^2, much stronger than the solution in water. I have seen good results in threatened collapse in typhoid fever and other low conditions from the hypodermic use of ozonic ether. I believe that this is not due to the ether only, but that the oxygen is of decided value.

DR. M. PRICE: I would like to ask to what the benefit from the use of nitrous oxide is attributed? Fifteen years ago we used nitrous oxide at the dispensary for the extraction of teeth. Many consumptive cases in which it was used came back in a few weeks stating that they had never been so much benefited as from inhalation of the nitrous oxide. My explanation is that the nitrous oxide, acting as an anæsthetic, lessens the pain of respiration, and the patient in his efforts to secure air expands the lungs, filling portions of them that have not been used. The action is just the same as where we break up the adhesions about an ankylosed joint under ether. I have employed the nitrous oxide in many cases of phthisis with advantage, and dentists have informed me that they have often been told by consumptive patients that they had been benefited by the inhalation of nitrous oxide.

DR. AULDE: Several years ago, I made some investigations with a view to the employment of Dr. Richardson's ozonic ether, but did not adopt it in practice for the reason that it gave off the fumes of ether, which is very objectionable to many persons; and second, because of its expense. As my remarks were not intended to deal with the therapeutic applications of oxygen, except incidentally, I cannot enter into a discussion of the physiological action of nitrous oxide, referred to by Dr. Price. In the course of my remarks I mentioned the supposed action of the nitrous oxide when given in concentrated form, as well as when diluted.

PUNCTURE AND COLLODION IN HYDROCELE.—For the treatment of hydrocele Leroy recommends that one-third or one-fourth of the fluid be withdrawn by means of an aspirator, after which the whole scrotum is painted with a thick layer of collodion, which is to be renewed every twenty-four hours. A cure results in from twelve to fifteen days. M. Broquet also has employed this treatment with success in three cases.—*Weekly Medical Review.*

THE PHONOGRAPH IN TESTING HEARING.

Read before the Chicago Medical Society.

BY GEORGE F. FISKE, M.D.,
OF CHICAGO.

It is certainly no exaggeration to say that scientific examination and treatment of the ear began with Anton von Troeltsch's method of using a perforated concave mirror reflecting daylight or artificial light into the ear. It is also probably true that since that time, 1855, more time and labor have been spent in attempts to devise satisfactory hearing tests than upon any other question of otology. Aurists have clearly recognized this lack and have known just what they wished to accomplish.

To give a definition of normal hearing power one must consider the hearing with regard to intensity of sound, ability to hear loud or soft sounds, with regard to the pitch, and the tone, quality and also the distinctness with which rapidly recurring tones or noises can be separated by the ear. It is in consequence impossible at present to establish an absolute standard of normal hearing. Practically, three means of testing are used: the watch, or similar instrument; speech, whispering or loud voice; and musical tones, tuning forks or musical instruments. Any examination of the hearing to be satisfactory must include all these tests, and we have for each test a standard as normal, which is however not arbitrary, depending, as it does, upon the degree of quiet in the room used, upon the voice of the examiner, the age of the examined, etc. To illustrate: in testing with the watch it is not infrequent to find a yonng person who hears the watch at the normal distance while ordinary conversation is heard at the distance of three or four feet with difficulty. If then we employ the watch alone in examining such a patient it is easy to make a serious mistake in diagnosis and prognosis. Then, again, in examining a man over fifty years of age it is the rule that the hearing distance for the watch is very greatly reduced as compared with youth. It may be that the watch is heard only upon contact with the ear, while whispering and loud voices are heard at the standard distance. Much more rarely there is a great difference between the hearing of words whispered and spoken.

I remember the case of a man forty-three years old with no history of aural or nasal disease, who asked me to test his hearing because he chanced to be present while his daughter was being treated. He heard whispering at three feet in a room where thirty feet was the normal distance, but to my astonishment on changing to spoken words he distinguished them at the normal hearing distance; in this case forty feet.

Similar variations, which can perhaps properly

be termed physiological, present themselves in examining with the tuning fork, due in some cases to education of the ear as regards the limit for high or low tones. Now the voice is by far the most important of our tests, not only because it is more necessary in daily life to hear the human voice than any other sounds, but also because it is heard with more constancy through life, with less variation on account of age. But this, our most important means of testing, is also by far the most uncertain. Not only is it extremely difficult to reproduce exactly the volume and quality of a given voice, but the voices of different examiners vary so greatly that the patient's statement that he heard two years ago Dr. So and So's voice at such and such a distance would be in very many cases of no help to the present examiner. The watch can be made an accurate test by making a standard watch of a certain loudness, which shall be adopted by all aurists. Politzer's acoumeter and new hörmesser accomplish this fairly well at a moderate cost. It is also possible to measure very accurately the hearing for musical tones by using as standard König's graduated tuning forks and steel rods. One might perhaps nevertheless claim that the voice as at present used suffices for all practical purposes, and this is true as regards testing persons of normal hearing, or testing differences of hearing before and after extracting inspissated cerumen as well as before and after treatment in acute catarrhal and purulent middle ear disease. But we have to consider also the different forms of chronic middle ear disease.

Formerly—some years ago—non-suppurative chronic deafness was regarded as incurable, perhaps made worse by treatment, and the patient was dismissed with the statement that nothing could be done for him—that he would not get worse, or, again, that as his general health improved his hearing would return. The patient was thus turned over to the mercies of the quack or of the enterprising manufacturer of patent invisible ear drums, whose advertisements still grace our periodicals.

To-day many of these chronic cases are cured entirely; many are improved; in some the progress of the disease is arrested, in others delayed, while in some cases there is certainly no help from treatment and sometimes a more rapid decrease in the hearing following it. In all these chronic cases it is important to measure the hearing for speech.

It is remarkably true that chronic catarrhal middle ear diseases are amenable to treatment in inverse ratio to their time of progress. When the aurist is consulted in the early stages of the disease it is of the utmost importance to know and to make the patient know two things, 1, exactly how much the hearing is impaired as compared with normal hearing, and 2, whether there is improvement or loss, however slight, between two dates, separated by a certain interval. Whether no treatment is given or change of climate advised or treatment directed to nasal catarrh or locally to the ear, it is of equal importance that such tests should be conclusive to the patient. This is however often impossible, when dependent upon the aurist himself. Aside from variation due to colds, age, etc., the patient places no such confidence in the physician's voice as in the test types of the oculist, hanging at the other end of the room, with the normal visual distance clearly marked upon them. Even with confidence on the patient's side and perfect conscientiousness on the physician's, it is impossible to reproduce with absolute exactness the words whispered or spoken—say one year after the first examination, and a slight mistake here might lead to a great mistake in prognosis and in treatment. At present records are of value only to the aurist making the examinations.

To sum up briefly we need a method of testing the hearing which shall 1, make use of human speech; 2, which shall be accurate and independent of the examiner; 3, which shall make a record capable of interpretation and use by other aurists.

It is believed that in the phonograph we have the only instrument which at present fulfils these conditions.

Prof. Lucae, in Berlin, has invented the phonometer, an ingenious instrument which measures the strength of expiration in speaking certain words. This fails in that it does not measure the clearness of articulation. Since the invention of the telephone many electrical acoumeters have been invented in which the tone is given by an electrical tuning fork, and the hearing distance for certain tones accurately recorded. Such instruments have been invented by Hartmann, Jacobson, Gradenigo and others; but they do not give articulate speech, which is an absolute necessity.

The thought that the phonograph would theoretically give the desired means of testing the hearing occurred to me long ago, as it has probably occurred to many others. It is, however, only recently that I have been able to use it in my own practice. In speaking in Berlin with Prof. Trautmann upon this subject he expressed the belief that it would prove useless in testing imperfect hearing because of the necessity of using a tube in the ear to transmit the sound, and because of the slight volume of sound. My own method of using the instrument is to dispense with all connection by tube to the patient's ear, measuring the distance in metres or feet at which the patient can repeat words previously spoken into a cylinder turning at a certain speed and then reproduced by the phonograph, the patient being placed at first beyond hearing distance and

then gradually brought nearer the instrument. I then record name of patient, date, and hearing record upon this same cylinder, either giving same to the patient or keeping it carefully put away. In addition to this voice test I test through a tube one meter long the softest whisper which the patient can distinguish. My attempts to use whispering to measure the distance in the same way as with the voice have failed for the reason that the hearing distance for the normal ear is only from one to two feet. My own experience has shown that Prof. Trautmann's objection as regards volume of sound is not valid, the phonograph reproducing words with such volume that the normal ear hears and repeats them at forty feet in a quiet room, thus giving good range for testing slight and moderate loss in hearing distance.

In testing patients having partial hearing, one heard loud whispering at fifteen feet, the phonograph at twelve feet; another the loud whispering at five feet and the phonograph at two and one half feet; a third whispering at three feet, phonograph at one foot. These and similar cases show what one would expect—that the human voice is heard relatively farther, by those persons whose hearing is imperfect, than its reproduction by the phonograph. Those patients who did not hear the whispering at all, did not distinguish the words of the phonogram, yet in such cases, where the loud voice is heard at two feet, one can test with the phonograph and the hearing tube. In case of those persons who hear shouting alone, or very loud speech, any accurate measurement of the hearing distance is almost impossible, and it is certainly not possible with the phonograph at present.

Among the objections occurring most forcibly to me during my work upon this subject the first was that it is not the human voice which is used, though a wonderfully perfect reproduction by mechanical means, and that the volume and quality of the voice lose in transmission. Yet the volume of sound is sufficient to give a range of forty feet to record differences in hearing distance, or more than the length of the room usually at the aurist's disposal, and the quality still permits of the recognition of a friend's voice. A new diaphragm still thinner than the one in present use is expected within a year, and this will undoubtedly add to the accuracy of reproduction and to the volume of tone.

The second objection was that the prepared cylinder, or phonogram, must in case of consultation be carried about by the patient and if lost, the record is lost. To obviate this I have in some cases prepared two cylinders, giving one to the patient and keeping one myself. The hope presenting itself to me before experimenting was that one person should speak into a cylinder and this cylinder be indefinitely reproduced by the electrotyping process, and fac simile phonograms be used by all aurists possessing phonographs, as all oculists use printed copies of Snellen's types. In fact this process has been carried so far that five accurate copies have been made of a given cylinder, although at a very great expense, and Mr. Edison hopes to make indefinite reproduction practicable.

Thirdly, the objection occurred as to the possibility of variation in different machines. The chief points where variation in the part of the machine would make variation in the reproduction are the glass diaphragm and the sapphire needles. The glass diaphragms are three one-thousandths of an inch in thickness and both they and the needles are made as exactly alike as is possible to skilled machinists. I have tested this question practically by taking the same cylinder and using it in the same room on three different machines taken from stock at random, having the hearing distance controlled by another examiner whose hearing is normal, and by myself, and we could detect no difference in the hearing distance for the different machines. The possibility of the sapphire points being screwed in loosely or similar mistakes cannot be obviated, which is true of any instrument of precision.

Among less important objections are the cost, sixty dollars per year. Then the wearing out of the cylinder by use, which can however be neglected, as one cylinder has repeated thirty-four hundred times before becoming indistinct, while I have myself tested the same cylinder one hundred times with no discernible difference in clearness of tone. The time which is necessary for its use is also an objection to the instrument. This holds however only for the first examination; afterward no more time is necessary than in other methods of testing.

In using the phonograph it is desirable to have a room which is quiet—indeed, this is the only way in which uniformity can be obtained, and a second examiner make a comparison with the previous phonographic record, phonogram, brought by a patient. The instrument itself is undoubtedly familiar to you all. The only points of adjustment are the speed of the cylinder and the screw which, after a cylinder is put on the phonograph, enables the reproducing needle to fit exactly in the grooves in the wax made by the recording needle. Both adjustments are very easily made. In practice I set my own instrument at one hundred and twenty revolutions per minute, which speed seems to give the best reproduction.

In concluding I can only say that my own experience has satisfied me that my phonographic tests and records are far more reliable and accurate than any I have been enabled to make by any other method. And yet it seems to me equally certain that in the future this method of testing will be rendered still more perfect.

438 La Salle av.

THE CLINIC.

DIAGNOSIS OF AN ABDOMINAL TUMOR; BROKEN NEEDLES LEFT IN WOUNDS; PROSECUTIONS FOR ALLEGED MALPRAXIS.

A Clinical Lecture delivered at the University Hospital, Philadelphia.

BY WILLIAM GOODELL, M.D.,
OF PHILADELPHIA.

The age of this woman is 43 years, she is married and has had eight children. I have not seen her before, and she has been sent to me by her physician for a diagnosis of her case. Her present ill health began after an attack of pleuropneumonia, with vesical disturbances, especially a burning and scalding upon urination. She still menstruates regularly and has no uterine trouble. But she complains that she has no appetite; that she always has a sensation of fullness over the epigastrium; that after eating she feels distressingly distended; that during the last four weeks, for no apparent reason, she has been losing flesh, and that there has developed in her abdomen "a swelling." "Swelling" is the euphemism she employs, because the word *tumor* has a hateful sound in every woman's ears.

As I look at this abdomen and gently percuss it with my finger tip, I see a wave travelling over its surface, and there is transmitted to my hand on the opposite side a very marked sense of fluctuation. Fluid being evidently present, the next question to be answered is this: Is this fluid free, or is it in a sac? If it were in a sac, it would lie in front of the intestines and I should have a dull sound on percussion, especially in the region of the navel and below it. But if the fluid were free, the intestines, as they contain wind, would float upwards on the surface of the liquid, and consequently give resonance on percussion. But on percussing now I find there is no dulness whatever, even at the most prominent portions of the abdomen. I think, therefore, that this fluid is free in the abdominal cavity. Yet in this opinion I may be mistaken; that is to say, the fluid may not have been originally free, for it may have escaped from a ruptured ovarian cyst. Yet if this condition had been caused by such a mishap, there would be the history of a sudden and serious peritonitis, or certainly of great peritoneal pain with more or less collapse; but upon inquiring I cannot elicit the history of such an occurrence, so that I still believe that this fluid in the abdominal cavity was free from the start and not from a ruptured cyst. Now this free fluid in the cavity of the abdomen comes usually from some disease of that great vital tripod—the liver, the kidneys and the heart. I shall start with the liver, as I am nearest to that organ. There is no enlargement of it, and no cirrhotic atrophy. There is, in fact, nothing wrong with it in so far as I can make out, but not being a liver specialist, I may fail to detect some of its more recondite diseases. Nor can I find anything abnormal with the heart to explain the presence of this abdominal fluid. The urine has been carefully examined and proves that the kidneys are perfectly healthy. There is no history in this case of chronic peritonitis, so that up to this point I am at a loss to account for the dropsy.

This compels me to make an examination of the pelvic organs. The patient's nates are well drawn over the edge of the table, and her feet held by two assistants. I find here an enlarged womb, as well as a laceration of the cervix. But these lesions can have no bearing whatever upon the case in hand. The measurement of the uterus is plus three inches. I can find, then, no pelvic cause for her trouble; but she is very nervous and so incapable of thoroughly relaxing her muscles that my diagnosis is not complete. The only way to examine her satisfactorily would be to remove the fluid and then to exhibit ether, if the neurotic element were still in the way. However, before I tap this patient I shall hand her over to the Medical Department, in the hope that they may there either diagnose her case or remove this ascitic fluid without resorting to an operation. (The patient was here removed.) There is such a thing as a saddle-bag cancer straddling the spine and pressing upon the large veins which lie there. This will be readily discovered when she has been tapped. I did not say this in her presence because *cancer* is a forbidden word to a suffering woman, and I hardly knew how to explain my meaning by another euphemism.

PROLAPSUS UTERI AND METRITIS FROM CERVICAL LACERATION.

This woman has had three children and all of her labors were natural. She complains of having had leucorrhœa, pelvic pains and backache since the birth of her first child. Dr. Taylor tells me that she has had a bad cervical tear and also a cystocele; but upon the latter I shall not attempt to operate today, as I have not the time.

I ask the question: Why does this woman suffer so much pelvic pain? The trouble began primarily in the laceration of the cervix, which by keeping up a source of constant irritation invited an abnormally large blood supply to the part. The result of this overflux of blood is well expressed by the single word, hypernutrition. The weight of the uterus being thus increased, it became displaced and pressed abnormally upon adjacent structures, which could not bear the weight without resenting it.

She is now put in Sims' left lateral position and when the speculum is introduced the vagina is ballooned up by the air's rushing to fill up the

vacuum. I then take a stout shoemaker's thread and pass it through the cervix, in order that I may by this means draw the uterus down to within easy reach. The laceration, which is red and angry looking, presents some degree of ectropion. The sound gives a measurement of plus three inches. Taking hold of this string, I hold the organ in position while I denude the lips of the old laceration on either side, taking care to leave on each lip and opposite to each other ribbons of undenuded tissue in the middle where I wish to make my future os and cervical canal. This bad tear which those of you who are on the front benches can readily see, is what used to be called an "ulceration of the womb," and is still so called by some physicians who compose the rear guard of our profession. I am often at my wits end to know what I should bring before you in the way of an operation. If I have one like this—which is almost concealed from view—very few of you can see what I am doing. On the other hand, if I do a laparotomy, which all of you would be able to see, the operation is one which most of you would and should never perform. Yet you must see the larger as well as the smaller operations, but I generally reserve the latter for the ward classes, which being limited in numbers, can see every step of the operation. Therefore, at our next clinic I expect to remove, in this amphitheatre, a large solid fibroid tumor of the uterus, and the week after a very large and diseased kidney. I have reserved them specially for these occasions because the operations will be visible to all.

I am not left-handed, but by resting my elbow on the table I can use my left hand pretty well in working with this long handled knife, which I prefer to scissors. Scissors do not cut so smoothly as a knife and, therefore, do not leave a wound, which can be so perfectly coaptated. The cervix was so soft, large and angry looking that I feared pregnancy, until I had made a careful examination into the case. But as a result of this condition there is an unusual loss of blood, from this operation which is generally comparatively bloodless. Having denuded all the torn surfaces, and having left a narrow undenuded ribbon in the middle of each lip, I am now ready to sew it up. The needles for this operation should always be so tempered that they will bend before breaking, otherwise they will be liable to break off in the hard cervix which is sometimes as tough as sole leather. When once they break off it may be impossible to find the fragment without an injurious dissection of the parts. Not long ago I casually heard that a skilful surgeon in a distant city was about to be sued for $10,000 damages, because it was accidentally discovered by another physician that the former had left a piece of broken needle in a perineum which he had repaired.

I accordingly wrote to this brother in distress that, if my evidence could help him out of his difficulty, I should be glad to furnish it. For I had more than once left at least half of a needle in the cervix and at another time fully an inch of a large needle in the perineum. These patients are perfectly well and to this day do not know that they are carrying portions of surgical instruments in their bodies. I also recalled to him the fact that many hysterical girls have with impunity converted themselves into human pin-cushions by swallowing innumerable needles, which have travelled all over the body and been extracted at places very remote from the stomach. I presume there is not a surgeon, who has not broken needles and left a fragment in his patient's body, without the slightest mischief accruing. When one can tie, as many have, the pedicle of an ovarian or uterine tumor with iron or silver wire and drop it into the abdominal cavity to remain there until doomsday; or when we get broken bones to knit by uniting them with strong iron wire; or when one can leave for weeks, as I have done in chronic peritonitis, a glass drainage tube in the highly sensitive and vulnerable abdominal cavity; surely a needle in the cervix or one in the perineum can do no more harm than an earring.

But these attempts to prosecute a physician on the slightest provocation, have made me very cautious. For instance, I never perform an oöphorectomy, without explaining in the presence of competent witnesses, why I wish to perform the operation and what will be its results. A very unfortunate English physician neglected this precaution, and as the result lost money, health and an enviable hospital appointment, although he won finally at the end of a protracted, expensive and most worrying suit at law. The husband complained that his wife was unsexed; the wife, that she was not told what the nature of the operation was to be; the narrow-minded directors of the hospital, that the surgeon had operated without calling in counsel.

Let me give you one of my experiences: Not many years ago one bitter cold day in winter a poor man came to my office from a town several miles distant in a neighboring State, begging me to come to the aid of his wife who had been long in labor and could not be delivered.

It was in the midst of my office-hours, the weather was very cold, the fee offered was not a tempting one and I requested him to go for some one else. But he begged so hard that for humanity's sake I could not refuse. When I got there I found that his wife had a shoulder presentation, and had been attended by four physicians, who each in turn had tried in vain to turn the child, and deliver her. They were all present and as the question of embryotomy had come up they had sent for me. The woman was much exhausted, and we all felt that her only chance lay in a speedy delivery. She had been kept more or less

under ether for hours, and a little more was now given her. Knowing that the womb had moulded itself to all the irregularities of the child, which moulding had prevented version I concluded to try a wrinkle of an old French accoucheur whose name I have forgotten. It was this: I caught hold of the hand of the shoulder which did not present and made traction on it. This manœuvre turned the child over, on its long axis, and extricated its body from the uterine mould which had "set" around it like a cast of plaster. I was then able very readily to make podalic version, and to deliver the body as far as the head. But here an unexpected difficulty occurred, one which I have never met with before or since. The long irritated cervix or the lower zone of the womb closed like an iron collar around the neck of the child and imprisoned the head. While I was trying to release it, the woman suddenly and unexpectedly died. All this occurred within a very few minutes.

I shall not describe the scene that followed; it was a very painful one. My only consolation was that I had done my duty. Now, would you believe it! A few days afterwards each one of the physicians present, including myself, was notified that a suit for malpraxis had been instituted against him. I put my case in the hands of a lawyer, who gave me a letter to a leading citizen of that town, asking him to stand bail for me in case I should be arrested, as I might be at any time when called there on a professional consultation. For, of course the plaintiff would be only too glad to arrest me and try me in his own State. For months I carried this letter in my pocket, but I never had to use it, for when the matter came to the pinch we all showed such fight, that the case was abandoned. This is the second time that I have been threatened with a prosecution for alleged malpraxis; but in it I also more than met the plaintiff, and that case was also abandoned.

In this relation let me tell you what I read in the daily papers the other day, showing how careful we all should be to surround ourselves by safeguards: A physician in Belgium, in a case of necrosis of the leg of a child warmly advocated excision of the dead bone. The mother said she would give her consent as soon as the grandmother was willing; but it took the old lady exactly one year to make up her mind. Her consent being obtained, the child was etherized and the diseased bone laid bare; but it was then found that the necrosis had proceeded so far during the year that it was impossible to save the limb. Accordingly, the surgeon assumed the responsibility of amputating the leg. He was sued by the father and had to pay him 10,000 francs for damages.

In this country, surgeons of note were often prosecuted for the unavoidable shortening of fractured long bones, especially of the thighs, during the process of repair. Indeed, if I am not in error, even the late Prof. Samuel D. Gross, with all his reputation, had to stand a suit for malpraxis. But this is becoming more and more rare, because the community is getting more and more intelligent. The practical lesson that I wish to impress upon you all, by citing these examples, is simply this: that if the public presumes to attack the professional characters of men who are your medical teachers, how careful you should be in all important cases to guard yourselves by calling in older and more experienced advice—and by getting the responsibility shared.

Again; never say there is absolutely no danger whatever in any operation or in any surgical procedure. On this point some years ago I got a bitter lesson: I was asked by a patient, upon whom I was about to operate at one sitting for a laceration of both the cervix and the perineum, whether there was any danger to be feared from the ether. I laughed her to scorn and called it the child's play of the operation. But mark the result: both operations were performed and very satisfactorily too, but as the lady emerged from ether-narcosis, incessant vomiting set in which could not be controlled by any means known to me, or to a consultant whom I called in. On the fifth day she died from heart failure, from this very etherization from which I said there was no danger. Therefore, I now never tell a patient that there is no danger whatever in any operation.

So I take this lesson home with you to day: Never to promise too much to your patients; for as you are not sure what the day will bring forth, you certainly never can be sure what an operation may bring forth.

MEDICAL PROGRESS.

IMMUNITY AND INFECTION.—These conditions have recently attracted marked attention from Continental writers, especially in Italy and France. Numerous theories have been advanced, none of them can be said to have been wholly satisfactory, or to account for all the varying and apparently contradictory facts.

CHARRIN et ROGER (*Contribution à l'étude expérimentale du surmenage. Son influence, sur l'infection. Arch. de Physol.*) have made some experiments regarding the effect of fatigue upon infection, upon lines laid down by Solowieff, who demonstrated upon horses and men that great fatigue favored the development of certain infectious disorders. In their experiments animals were employed, that had been exercised in a revolving drum. The reaction of different species to this treatment was found to vary greatly, rabbits and guinea-pigs soon presented evidences of pain,

fright and vertigo, that were soon followed by a fall of temperature and death. Dogs, cats and white rats bore this extreme exertion without special disturbance, and after running twelve hours in the drum would be in a normal condition the following day.

In the first experiment thirty-six white rats were inoculated, part with a weak culture of anthrax and part with the bacillus of "charbon symptomatique." Twenty-one of these animals were placed in the drum and allowed to run from two to eight hours, the remainder were reserved for control. The results in all the experiments were nearly equal, the animals that were fatigued died in less time than those which were allowed to remain quiet; in some instances the animals that were allowed to rest would survive the infection—the others invariably died.

THERAPEUTICS OF GASTRIC DYSPEPSIA.—M. GEORGES contributes (*Revue Médicale de l'Est*, September 1, 1890) a paper on this subject, based on a number of experiments he has made on the relative digestive powers of natural and artificial gastric juices. Cubes of hard-boiled white of egg were placed for a certain length of time in an artificial gastric juice containing HCl and pepsin in varying dilution. He finds (1) that to effect a speedy and satisfactory digestion of hard-boiled egg or of roasted and raw meat it is necessary to use a gastric juice containing a large quantity of HCl and a minimal quantity of pepsin. (2) The hydrochloric acid ought to be employed sufficiently dilute; a 0.4 per cent. dilution appears to be preferable to one either weaker or stronger, such as 0.1 per cent. to 0.2 per cent. or 1 per cent. (3) The best proportions of HCl (0.4 per cent.) and pepsin are about 5 cubic centimetres of acid to 2 centigrams of pepsin. (4) It is necessary to employ the artificial juice thus made in sufficient quantity to obtain the best result. Thus if the above proportions of acid and pepsin be taken as the unit, it may be said that the digestive power of the juice increases with the quantity employed, and that the increase is in the proportion of 12 to 8. This only applies, however, within certain limits. A combination of 40 cubic centimetres of a 0.4 per cent. solution of HCl with 8 to 10 centigrams of pepsin gives the best results of all. His observations on the digestive capabilities of natural gastric juice were made on 142 specimens taken from 69 patients. In 8 cases of "chlorotic anæmia" the contents of the stomach were found on eighteen occasions to have no digestive power at all; on two occasions they possessed a slight power; and on one occasion digestive power was normal. In each of these cases the addition of pepsin failed to modify the digestive action; in one instance, indeed, it appeared to delay it. The addition of HCl, on the contrary, had a very marked effect in 12 cases, but was without result in 8 cases. Of all the degrees of dilution employed, 0.4 to 0.6 per cent. of HCl gave the best results. In 9 cases of gastric ulcer the digestive power of gastric juice was found to be excellent on nineteen occasions, and absent altogether on ten. In these ten instances pepsin was found to be hurtful in its action on three occasions, while HCl (0.4 per cent.) restored the digestive power on six occasions. Analogous results were obtained in 92 specimens of gastric juice obtained from 52 different cases, including such affections as tabes, catarrhal jaundice, acute and chronic gastritis. In 87 of these 142, the gastric juice was without digestive power. The addition of HCl (0.4 per cent.) proved useful in 16 cases, while pepsin entirely failed, even impeding the digestive process on twelve occasions. The result, therefore, of the observations on 142 samples of gastric juice was that 115 were found without digestive power. In all these cases pepsin had no action, appearing sometimes to be even hurtful (sixteen times). The conclusion he draws from these data seems, then, justified—namely, that pepsin is useless where the dyspepsia is due to some primary or secondary disturbance in the gastric secretion, while hydrochloric acid can be used with advantage in such cases. A further series of observations on the digestive power possessed by various medicinal preparations containing as their basis hydrochloric acid, pepsin, pancreatin, or papain, showed that they were without action in all cases; they did not facilitate digestion either in the case of artificial or of natural gastric juice.—*Brit. Med. Jour.*

THE DISORDERS OF SLEEP.—In a recent article DR. WEIR MITCHELL devotes himself to a consideration of a topic of more than ordinary interest—the disorders of sleep. Our text-books usually contain brief and unsatisfactory chapters on sleeplessness and its treatment, but further than this they seldom go; yet sleep is infested by a multitude of derangements whose uncertain pathology has hitherto rendered their classification very imperfect.

The little actually known regarding the nature of sleep, has perhaps tended to keep in abeyance speculations regarding the disorders that accompany the somnolent state; for in addition to the fact that the sleeping brain contains less blood, or that the blood within it circulates more slowly than in the brain awake, we know nothing, and can only affirm in a general way, that sleep is a condition of the nerve cells, a definition even less satisfactory than that given by Sidney Smith to the person who asked him what an Archdeacon was, when he replied that an Archdeacon was a person who performed archdeaconal functions.

The periods before and after sleep are often found to be states of unusual liability to halluci-

natory disturbances. These periods Dr. Mitchell has, for convenience, termed the prœdormitium and the post-dormitium. Baillager, whose brilliant researches have covered every region of delusional manifestation, found that hallucinations in the prœdormitium were exceedingly liable to be prodromes of an outbreak of insanity. In the half-conscious state the control of ideas is lost, and fantastic shapes crowd upon the mind as the outcome of external sensory impulses.

Another derangement, perhaps allied to the intellectual disturbances just mentioned, is an emotional derangement, which consists in an intensely aggravated sensation of fear. This seldom occurs in the prœdormitium and generally follows a sleeping period. Faulty digestion may contribute something to this, and the painful emotion may be the subjective interpretation of visceral impulses, as the emotion appears without traceable parentage in dreams or sensory illusions. More frequent in occurrence than this, is the condition known as "the fidgets," where the patient, filled with all manner of unreasonable fears, is a prey to perpetual unrestfulness.

Another peculiar sleep disorder is sleep-numbness or nocturnal paresis or paralysis, which differs from all similar paræsthesiæ, being unlike those of neurotic, anæmic, gouty or asthenic origin. Some have deemed this paræsthesia to be connected with a subsequent attack of diabetes. First thoughts would naturally revert to excessive overwork or tobacco as responsible for this form of paralysis. Dr. Mitchell, however, appears convinced its origin is central.

Sleep-ptosis or palsied eyelids is another disorder allied in character to these just noticed. Dr. Mitchell reports two cases. The patients awake with palsied lids; when opened they close again. This is one of the night palsies of temporary duration.

Sleep-pain is a frequent hysterical symptom. Any one, however, who has suffered from the leg-ache peculiar to sleep, will realize that pain can certainly persist throughout the sleeping period.

Sleep-jerks of choreic character are among the most common phenomena when the motor area is involved. These are more frequent than tonic spasms, which are manifested but rarely.

The whole subject of sleep disorders is one of great interest, and deserves to be patiently and carefully studied.—*Physician and Surgeon.*

Dietetic Management for Digestive Disturbances in Children.—Dr. G. Rheiner, in *Wiener Klin. Woch.* (*Therap. Monatsh.*), warns above all against beginning the treatment of digestive disturbances in children with drugs; the dietetic management is and will remain the most simple, as well as by far the most rational. A child that manifests moderate gastric disturbances shortly after being weaned, should again be nourished from the breast, in order to quickly relieve it from its digestive difficulties. In cases of gastric dyspepsia occurring in bottle-fed babies, Rheiner warmly recommends washing the stomach, as introduced by Epstein, of Prag. After this procedure the digestive powers of the stomach will probably remain weak for a few hours, and for a short time it will be necessary to replace the water lost by the body by a suitable diet. As such, albumen and water (the white of an egg to a pint of water), barley water, or a very weak infusion of tea, suggest themselves. In intestinal dyspepsia we should carefully guard the stomach against disturbing influences. For this reason anti-diarrhœal mixtures should not be at once administered; we should rather order an exclusive diet of milk and barley gruel to a suitable proportion of water. Here the constipating qualities of barley gruel are valuable as compared with oatmeal gruel; the latter, used in constipated infants, will, as a rule, bring about two or three loose evacuations per day. In closing, the author emphatically remarks that in many cases we can get along altogether without drugs.—*Weekly Medical Review.*

The Future of Dermatology.—In the Dermatological Section of the meeting of the British Medical Association of the current year the address was made by Jonathan Hutchinson on the above subject.

The object of his address was mainly to point out the value of dermatology as a field for clinical observation, and as a department of general medicine.

He showed what the laws were which governed the study of dermatology, and how rich a field it formed for the student. The aim of all true-hearted specialists was to break down the walls of specialism. He referred in illustration to the instructive nature of the group of maladies known as herpes, and the peculiar influence of arsenic upon it. Despite the etymology of its name, no true herpes ever creeps or spreads in the least. What was seen in a large majority of disorders of the skin led to the belief that common inflammation, however produced, was more or less infective. His belief was that it was possible to exaggerate the importance of the doctrine of the infectiveness of common inflammation.

Treatment should rather be aimed at the repression of local inflammation, and at preventing dissemination by infection. He referred to the action of inheritance on skin diseases, and said that Kaposi's disease was one of the best examples of "family disease," which he said simply seemed to be the inheritance of a skin that would not bear exposure to sun and air. Then, again, the battle of the hypothesis of cancer would have to be fought out on the skin, and rodent ulcer

might indeed, by itself alone, form an epitome of our knowledge of the subject. In melanosis the picture was completed, and the infection of the blood was seen in its fullest energy. He next referred to the opportunities offered in connection with skin diseases for the study of therapeutics and for observations on the action of drugs. Arsenic, of course, stood foremost among those concerning which we have collected important and even astonishing facts.

There was no more wonder-producing fact in the whole range of therapeutics than the ease and rapidity with which arsenic contracts and cures common pemphigus. There may occasionally be exceptions, but, as a rule, not another bulla appears after the remedy has been commenced. We have, indeed, ceased to see any cases of "chronic pemphigus" since this fact has been made known. How the drug acts we know not, neither do we know the real nature of the malady which we cure. It does not always cure it, but it always changes it for the better. He who would unravel all the mystery of how the bullous eruption may be cured and the scaly one changed, how the skin may be made to clear up in one case and muddy and brown in another, how peripheral neuritis may be produced to end finally, unless prevented, in some severe form of paralysis and death, and how in rare instances the nutrition of the skin may be so influenced that keratosis and even cancer may be the result, will certainly find that he has his work cut out for many years.

In the study of dermatology he pointed out that we have in the first place to avoid narrowness and specialism, and in the second place to develop to the utmost our knowledge.

Only the foundation of the subject has as yet been laid.

More minute examination was needed in every direction, and the careful examination and record of clinical facts exactly alike.

All possible aids must be invoked.

The microscope, the photographic camera, the artist's pencil, but, above all, the trained eye and the pen of the skilled and patient observer, must be brought into full use. No one can make the attempt to classify skin diseases without soon perceiving that many well-recognized forms claim a place in more than one group. We are engaged in a very different task to those of the zoölogist or botanist, though, after all, the differences are only in degree, and they encountered the same difficulties, only to less extent. They, like ourselves, have to recognize connecting links, hybrids, and mongrels. In order that dermatology should prosper as a part of medicine, it is essential that we should learn to use our names lightly. Nothing has more impeded the progress of dermatology, nothing makes its study more repellant to the student, or its knowledge more difficult of attainment, that the habit of giving an arbitrary name to every little group of phenomena, treating that name as if it represented a substantive and isolated reality, and insisting that the facts of disease should be made to group themselves in accordance with our conventional nosologies.—*The Lancet.*

PLEXIFORM NEUROMA.—E. LACROIX and P. BONNAUD (*Arch. de Méd. Experimen.*) describe the case of a lad 12 years of age that for the past six or seven years presented a slowly enlarging growth upon the left shoulder. The tumor was not painful, the skin movable, pigmented, and sensibility lessened. The tumor was readily movable upon the subjacent tissues, and presented a general appearance like that of an inflamed varicocele. The operation revealed a mass of fibres varying from a thread to a feather-rib in size, and extending between the muscular septa. Microscopic examination showed the tumor to consist of mostly hypertrophied nerve fibres, the nervous elements as well as the connective tissue participating in the hypertrophy. It was connected with nerve bundles and simply consisted of an enormous number of Remak's fibres, with here and there a fibre presenting the medullary sheath.

EARLY DIAGNOSIS OF KIDNEY TUMORS.—M. GUYON believes that surgical intervention is indicated, both for diagnosis and treatment, when characteristic hæmaturia and pain distinctly localized in one or other loin are met with, and in his opinion the time when the tumor is perceived must not be waited for. The cystoscope, though of service, is a defective means of diagnosis in his experience, and fails to declare which is the affected kidney. *Periodic* microscopic examination of the urine is needful before deciding that hæmaturia is absent.—*Annales des Maladies des Organes Genito-urinaires.*

RAPID DILATATION OF URETHRAL STRICTURES.—DR. P. SETTER reports the following modifications of Le Fort's method, as practiced in Brun's clinic. After induction of anæsthesia a filiform bougie is passed through the stricture. A well oiled catheter is then screwed to the bougie and carefully inserted, using the latter as a guide. The dilatation is kept up from five to fifteen minutes, after which the catheter is withdrawn and replaced by one of larger calibre. This is followed by a third and fourth, and if the resistance is not too great, the largest sized instrument can be introduced. This method is contra-indicated in tight strictures where too much resistance is encountered, in cases where the urethra is very sensitive, and finally in cases where rapid relief is required. Aside from these, the method is excluded in comparatively wide, or in impermeable strictures.—*Centralbl. f. d. Gesammte Therapie.*

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PROFESSOR KOCH'S NEW REMEDY.

No other event produced an impression so profound in the vast assemblage of medical men at Berlin, as did the reading of a paper by DR. KOCH, in which he stated his definite conviction that not only had the bacillus of tuberculosis been identified, but that he had in hand the remedy for its control. It had been his purpose before its publication to subject it to a most thorough testing, and in every particular to perfect the details for its use. But a discovery of such untold value could hardly be held in confidence. The public press had already contained such exaggerated statements that at the urgent solicitation of his friends, rather than from his own inclination, he was induced to present to the International Congress a preliminary paper upon his treatment of tuberculosis. He then intimated that as soon as his investigations should be in some measure completed he would more fully communicate to the world the facts with reference to his discovery.

In the *Deutsche Medicinische Wochenschrift*, of November 15, his second communication is published. No one who peruses this article can fail to appreciate that if his clearly expressed convictions shall be fully realized, it will prove the most important communication ever given to the world by human hand.

We mark with utmost satisfaction the candor with which he gives expression to his belief and we by no means hold him responsible for the headlong conclusions to which some of his followers at once attained. Since the meeting at Berlin he has summoned to his aid a number of eminent men whose names are a guarantee for the fidelity of their work, and in connection with his paper we also find the statement of the results of their individual work, all strongly confirmatory of his claim.

In reading his paper we confess to a disappointment at the outset from the fact that he still declines to divulge the nature and physical character of his new remedy. In the absence of the material facts, it is not within our province to criticise. We cannot believe that a name destined to be so illustrious, and a remedy—if such it shall prove—of such inestimable value shall be degraded to the service of mercenary ends and freighted with shekels.

The remedy is described as a brownish transparent fluid not easily decomposed, of which a cubic centimetre of a 1 per cent. solution is a dose, to be introduced by hypodermic injection preferably upon the back of the patient between the shoulder blades, in which location it produces less reaction and causes less pain. Human patients are found to be far more susceptible to its influence than are the animals generally used in making experiments. Thus it was found that while a guinea pig would readily tolerate the injection of two centimetres of this fluid, one-eighth of that amount would produce intense effects in a healthy man.

With reference to those effects he states that in persons in health or subject to other than tuberculous diseases, hardly any special result is observable, and that this fact will be of special diagnostic value. The reaction which follows the introduction of the remedy usually begins some four or five hours afterward and lasts from twelve to fifteen hours, sometimes later and with less intensity. It begins with rigors and with fever, pain in the limbs, coughing, fatigue and vomiting. The patients recover promptly from the attack and express themselves as feeling better than before. Of course the therapeutic effects are those that most concern the medical man and the welfare of mankind. One thing he says is certain, "there is no question of a destruction of the tubercle bacilli in the tissue, but only that the tissue enclosing the tubercle bacilli is affected by the remedy." Necrosis of infected

tissue results and its removal must be sought. He reaches the conclusion that patients become more and more tolerant of the effects of the remedy as they are less and less affected by tubercular disease until, in the absence of effect, we may infer that they are cured. The remaining portion of his communication deals with the application of the remedy in lupus, in tuberculosis of the bones and joints, in phthisis and to its effects on advanced cases of that disease.

A large portion of the next issue of THE JOURNAL will be surrendered to the presentation of the paper of Dr. Koch entire, and to the recorded observations of those associated with him in his investigations. Medical men throughout the world will wait the verifications of results, here claimed, with interest most intense, and if in any measurable degree our hopes shall be realized, this work of Dr. Koch will mark a most signal epoch in the world's history.

JUSTICE TO THE DEAD AND THE LIVING.

A considerable amount of attention has recently been directed to the possible extinction of traces of criminal destruction of life, through the methods now in vogue among funeral directors and their agents for the beautification and preservation of the corpse for burial. One of the chief objections urged against cremation has been that the evidences of willful murder might be incinerated with the body, and medico-legal investigations thus be set at naught. Certainly the same wholesale obliteration of the direct instrumentation of crime must occur, when the undertaker, as soon after death as in his wisdom sees fit, injects into the vessels and into the stomach of the silent victim, a liquid mass of potent chemical ingredients, for embalming purposes, which must inevitably affect or completely change the composition of any poisonous agent that may have been introduced during life for nefarious purposes. There is a prevailing tendency, at any rate, to relinquish into the hands of these representatives of a necessary but often unwelcome fraternity, the bodies of our dear ones, too soon after death, without question as to the treatment or consideration they are likely to receive; and embalming for burial is one of the processes of personal adornment of the corpse, which tickles the fancy of the thoughtless, but frequently makes the judicious grieve. That is a sentimental view of the question, however, which we need not pursue further.

As a matter of medico-legal interest, it is our duty as medical men to interpose some check to this fashionable folly, to say the least of it; but also, to put it more forcibly, to inhibit, by some, severe legislative restriction, a practice that will, sooner or later, in some important criminal case, interfere seriously with the detection and punishment of guilt. Toleration of such procedures is almost equivalent to direct encouragement and sanction of them.

THE QUESTION OF THE REMOVAL OF THE JOURNAL TO WASHINGTON.

While, at the meeting of the Board of Trustees which was recently convened in Washington to consider this subject, some were in favor of such change and of immediate removal; to others it seemed a matter of such moment as to require not only careful consideration and deliberation before action, but that upon a question so important the views of the entire Association should be had, and that the decision of its members, rather than a vote by the Trustees, should govern.

The proceedings of the meeting of the Board will be found in this number of THE JOURNAL.

The responsibility for such action will devolve upon the membership, and at its next meeting the Association will doubtless decide the question. Editorially THE JOURNAL will not pass upon the question nor seek to influence those whose judgment must be final.

EDITORIAL NOTES.

FAITH CURE IN A NUTSHELL.—A very pithy statement—only a little short of being an aphorism—has been contributed against the validity of the proofs that organic disease can be removed by the faith process, as follows: "Clear medical testimony would *compel belief*, but the vague statements of the cured only *confirm doubt*." This striking antithetical declaration is by the pen of a layman, in the English journal, called *Regions Beyond*, devoted largely to missions in Africa. So far as the world at large is concerned, one or two good, clear medical certificates that organic troubles have been cured, would set the question at rest forever. The difficulty is, of course, to

get them. As an example of the kind of cure the cured patients themselves are content to report, we may point to the case of a man of some prominence having organic eye disease, said by the patient to have been cured by the prayer of faith; but if a cure was effected it must have been done without a restoral of vision as a proof, for the man was never able thereafter to read a single line, any more than he could before he was "healed." He is said to be in an expectant attitude, believing that so soon as the strength of his faith is what it should be, he will be able to use his eyes for vision. And yet he continues to maintain that he has been healed. The testimony of such minds must indeed "confirm doubt" among all thinking people.

NOTES FROM A PARIS CORRESPONDENT.—Professor Koch, whose reported discovery of an effective cure for consumption has attracted so much attention, will probably ere long exchange his chair at the Berlin University for a professorship devoted entirely to the study of bacteriology. He will thus be enabled to carry out his desire to apply himself wholly to the study of zymotic and infectious diseases, including not only cholera and tuberculosis, but also typhus, anthrax, diphtheria, and similar affections.

Dr. Liebreich, an eminent Professor of Therapeutics in the University of Berlin, in opening his winter course of lectures recently, dwelt on the enormous importance of Prof. Koch's investigations. He pointed out that in all remedies for disease there are two equally important groups, viz.: those dealing with causes and those dealing with symptoms. The most interesting thing about Dr. Koch's discovery, he said, was the fact that the process of cure he proposes is founded on a knowledge of the nature of the tubercle bacillus, that is, of the cause of tuberculosis. Dr. Liebreich hopes that the further application of Dr. Koch's method will greatly facilitate the effective treatment of infectious maladies of all kinds.

Numbers of persons suffering from consumption have already applied to Dr. Koch with a view to his method of cure being tried on them, but the reply they have received is that the treatment cannot at present be carried out except at Berlin, and not in hospitals, but only privately.

The well known medical authority, Prof. Schrötter, of Vienna University, claims to have discovered, quite independently of the Berlin Professor, R. Koch, a cure for tuberculosis. He has engaged to give a detailed explanation of his remedy at the meeting of the Vienna Society of Physicians. The preparations he employs in curing the disease are said to consist of compounds of prussic acid.

THE PHONOGRAPH IN PRACTICAL INSTRUCTION REGARDING PULMONARY DISEASE.—Dr. J. Mount Bleyer, of New York City, has been carrying on some experiments with the phonograph as a means of recording the various coughs and other sounds emitted by diseased throats and lungs, also the voices of singers when in abnormal conditions. As an instructive object lesson in diagnosis these recorded signs upon the phonograph may be useful as a uniform demonstration to classes of students, from year to year; uniformity being a feature of practical teaching that has never been aimed at because impracticable, if not impossible, in the days before the "sound writer" came into use. As a means of drill to those whose sense of hearing has not been quickened by previous musical tuition, the phonograph may prove very useful.

WHENCE THIS NAME?—The South Carolina "Redbones" have been thus described in an interview with Senator Hampton:

"There is a singular race of people in South Carolina called the 'Redbones.' Their origin is unknown. They resemble in appearance the gypsies, but in complexion they are red. They have accumulated considerable property and are industrious and peaceable. They live in small settlements at the foot of the mountains, and associate with none but those of their own race. They are a proud and high-spirited people. Caste is very strong among them. They enjoy life, visit the watering-places and mountain resorts, but eat by themselves and keep by themselves. When the war broke out several of them enlisted in the Hampton Legion, and when the legion reached Virginia there was a great outcry among the Virginians and the troops from other States because we had enlisted negroes. They did not resemble the African in the least, except in cases where Africans had amalgamated with Indians. This intermixture, which is common in the Carolinas, produces marvellous results. It takes the kink out of the hair of the African, straightens

his features, and improves him in every way except in temper. These Afro-Indian people are devils when aroused, and as slaves were hard to manage."

DR. GUSTAVE MONOD, some time Professor in the Faculté de Médecine, Paris, died on October 16, at the age of 86. He belonged to a highly respected family of Swiss origin, several members of which have been prominent pastors in the French Protestant Church. Dr. Monod leaves a son who is an *agrégé* of the Paris Medical Faculty and surgeon of the St. Antoine Hospital.

CHARCOT'S JOINT DISEASE IN AUSTRALIA.—At a medical meeting in Sydney, N. S. W., was brought forward the first and only case of that affection clinically examined in Australia. The patient, according to the narration in the *London Medical Recorder*, October 20, was a Frenchman by birth, aged 39 years, and was presented by Dr. Scott Irving of the University of Sydney. The affected joints were those of both hips and the left knee. The case attracted a lively interest among the medical men present, and a desire was evinced to become familiar with its salient diagnostic points. The case appears to have been a most typical example of the disease, and a history of syphilis eighteen years previously was given in connection with it.

MEDICAL MISSIONARY CONVENTION IN CHINA.—The medical missionaries residing in China had a conference or convention at Shanghai last May. It lasted three days and the meetings were full of interest. There are reported to be 101 medical practitioners at work in various parts of that country, 34 of these being women. One or more missionary hospitals are inaugurated every year.

A SANITARY SERVICE FOR THE RED SEA.—Premier Crispi, of Italy, has just caused to be distributed to the representatives of Italy in foreign countries a circular, in which he proposes the convening of an International Commission with a view to institute a sanitary service for the Red Sea. He suggests that two international sanitary offices be established, one for the medical visitation of ships which enter the Red Sea from the Indian Ocean, and the other for that of ships which pass from the Red Sea to the Mediterranean. Another proposal in his circular is to the effect that in connection with each of the two offices should be instituted an international sanitary station, where the ships must put in for disinfection when found to have cases of infective disease, actual or suspected, on board.

JENNER AND KOCH.—It is interesting to note the increased respect now paid to the memory and struggles of Jenner by those who are led to write hopefully of the discovery of Koch. One of our daily contemporaries gives a pithy summary of the reception ordinarily accorded to our great medical benefactors, a part of which is worthy of quotation here: "Small-pox was once even more prevalent in the world than consumption is now and scarcely less deadly. It held the position that its practical eradication has given to phthisis. But a physician found a means to fight it so effective that now many doctors in twenty years of practice never see a case. It is likely to become a medical curiosity. Yet this remedy was reviled, and the man who discovered it was denounced in his day as a charlatan and an impostor. This should at least warn the revilers not to be too hasty about Koch.

"That also was the story of a microbe made nearly harmless by the discovery of how to get at him. Jenner, it is true, did not know there was a microbe. Nearly every phase of his discovery was empirical. It was the same with the great discovery that overcame the palludal fevers. The Spaniards learned from the natives of Peru that fever could be cured by drinking the water of certain ponds around which grew the cinchona trees, and it is likely that these ponds were simply solutions of quinine. It is a great part of the function of science in such cases to give us reasons for what we already know, but Koch has reached his conclusions by strictly scientific stages. Can men of science regard his discovery as less valuable on that account?

"All the great discoveries, however, have passed through the same phases. Some deep thinker labors patiently for years, consumes his days and nights in difficult and baffling experiments and at last makes his way to the light. He is at that period the one man in the world who alone possesses all attainable knowledge of the subject. His discovery is welcomed at first in that spirit of enthusiasm for great things which is the best impulse of the common mind. But soon the doubters are heard from. The smatterers—men who

give hours where he has given years of study—come to the front to belittle his labors. There is, nevertheless, a scramble to realize the advantages. *Haste, incapacity and confusion coöperate to do harm. His method is applied in erroneons ways*, the promised results are not obtained, the discovery is discredited and all seems to end in a grand delusion.

"But happily that is not the real end of the story, for the silent and honest workers continue and the good makes itself felt. It will be thus with Koch's discovery. The charlatan clamor and activity that swarm to the front when fortunes are to be made do their little harm and die away, and when these clouds pass the world *will find that it is the richer for a great and effective remedy against a terrible disease*, and in this all the people have good reason to rejoice.".

THE prize of one hundred dollars offered by the American Association for the Study and Cure of Inebriety for the best original essay on the pathological lesions of chronic alcoholism capable of microscopic demonstration, has been awarded to Dr. P. F. Spaink, Baarn, Holland.

THE Russian Government has made an appropriation of 1,500 roubles annually for the maintenance of a Pasteur Institute in Tiflis for the cure of hydrophobia.

AT the Medical Congress of Cuba, Dr. Lyada read a paper on yellow fever, which disease he affirms not to have existed in Cuba before the African immigration.

THE AMERICAN DENTIST IN PARIS.—The following item in the Illustrated London *News* reflects the status of American dentistry at Paris: "Dr. T. W. Evans, the eminent dentist and proprietor of the *American Register*, has returned to Paris from a visit to Carlsbad. On Tuesday last, he invited a number of the dental and medical profession of the French capital to witness the operation, known as 'dental grafting,' which was performed by Dr. W. Younger, of San Francisco, who has a brilliant reputation in this department of conservative dentistry."

THE NATIONAL PENSION FUND FOR NURSES IN ENGLAND.—This is a kind of mutual benefit combination among nurses to provide at low cost against the accidents of disablement and declining years. The Princess of Wales is its presiding officer. About $290,000 is the fund acquired within the very short time that has elapsed since its founding. The motto of the association is, "Thrift and Benevolence offering rest to Age," and the seal represents two strong young damsels helping an aged woman with a crutch to ascend some door-steps.

SPECIAL MEETING OF THE BOARD OF TRUSTEES OF THE AMERICAN MEDICAL ASSOCIATION.

Held at the Riggs House at Washington, D. C., November 13, 1890.

Present:—Drs. Hooper, Hollister, Love, Nelson, Shoemaker and Hamilton.

The meeting was held in pursuance of the following call of the President:

LITTLE ROCK, ARK., Oct. 31, 1890.

Dear Doctor:—A majority of the Board of Trustees of the American Medical Association deem it essential for the best interests of the JOURNAL, that a meeting of the Board should be called to convene in Washington, D. C., and have so signified the same in writing. Therefore, in compliance with said request, I hereby appoint Thursday, November 13, 1890, at 10 o'clock A.M., at the Riggs House, Washington, as the time and place of meeting.

It is important that each member shall endeavor to make it a point to be present. Very truly yours,

(Signed) P. O. HOOPER, President.

The letter on which the foregoing call was made is as follows:

WASHINGTON, D. C., Oct. 14, 1890.

DR. HOOPER, President Board of Trustees, Little Rock, Ark.

Sir:—We, the undersigned, have the honor to request that a meeting of the Board of Trustees be called to meet in Washington, at your convenience, in November, to consider the report of the Committee on Permanent Place of Publication of THE JOURNAL; and also that of the Committee on Advertising.

(Signed) JOHN B. HAMILTON.
" JOHN V. SHOEMAKER.
" I. N. LOVE.
" W. W. DAWSON.
" D. E. NELSON.

The minutes of the previous meeting were read and as it nowhere appeared that the salary of Dr. Hollister, while acting as Supervising Editor, was fixed at $250.00 a month, on motion, it was ordered to be incorporated in the minutes of this meeting to take effect from the last meeting. The Secretary stated that he had no record of the meeting of the Board at which the foregoing action was taken, and that it was done during his temporary absence.

The proxy of Dr. Dawson and Dr. Moore was

presented by Dr. Hooper, who was by them authorized to cast their votes.

The Chairman of the Committee on Management stated that no meeting of the Committee had been held. He presented summary statements of receipts and expenditures with a list of payments made by advertisers for the month of October. The circulation of THE JOURNAL since April 1, 1890, had increased about 200, notwithstanding that nearly 300 names had been dropped from the lists for non-payment of dues. The question of incorporation was discussed and on motion of Dr. Love it was ordered that application be made for a certificate of incorporation.

Referring to the book of records, the Secretary stated that his letter of resignation as editor was omitted from the book, and on motion of Dr. Hollister it was ordered to be inserted.

Then, on motion, the Board took a recess until 2:30 P.M.

AFTERNOON SESSION.

The Board met at 2:30, and the Committee on permanent place of meeting, Dr. Love, Chairman, made a report in favor of Washington, as a permanent place of publication. He spoke as an individual member of the Committee. He advocated the appointment of a business manager.

DR. NELSON thought the question should be postponed until the next meeting of the Board.

The report of the Committee was then taken up for discussion.

DR. SHOEMAKER spoke of the necessity of strengthening THE JOURNAL, and advocated Washington as a permanent place of publication. He felt bound to those who put him on the Board to vote for the National Capital as the permanent place of publication.

DR. HOLLISTER argued in favor of submitting the question to the Association in session.

DR. HOOPER spoke in favor of delay, as he wished the question to come before the members of the Association, but said he would vote for Washington as a permanent place of meeting if it could be shown as the best location. He wanted it inserted in THE JOURNAL. He wanted a committee appointed to give the arguments or the reasons why THE JOURNAL should go to Washington, and have it published in THE JOURNAL.

DR. SHOEMAKER moved that the report be received and a special committee be appointed at once to formulate a plan as soon as the committee can do so, and report on the removal at this meeting, of which committee Dr. Hooper shall be chairman.

DR. HAMILTON said that so far as expense was concerned, if it were removed to Washington there would be no additional expense over that now involved in the publication at Chicago.

The committee, Drs. Hooper, Love, Nelson and Shoemaker then retired and presented the following report, which was adopted. Dr. Hollister voted No.

Resolved: That the sense of the Committee be that the home of THE JOURNAL of the Association should be permanently at Washington, D. C.

Resolved: That the Trustees incorporate the foregoing resolution in their report to be presented at the next meeting of the Association.

DR. SHOEMAKER, from the Committee on Advertising, reported that as the place of meeting was to be changed, he recommended that the committee be continued, with the addition of Dr. Nelson.

On motion it was ordered that the minutes be printed in THE JOURNAL.

DR. SHOEMAKER offered the following, which was adopted.

Resolved: That the Trustees recommend the members of the Association, or the various State and local medical societies in affiliation with the Association, to contribute or subscribe funds for the erection of a permanent building as a place of meeting as well as a library and office for the American Medical Association.

The Trustees desire a full discussion of the foregoing resolutions, and it was moved that in order to insure uniformity in the discussion it be requested that communications for THE JOURNAL on this subject be limited to fifteen lines.

On motion the Board adjourned until 10 A.M., Friday.

FRIDAY, 10 A.M.

The Board met pursuant to adjournment. Present: Drs. Love, Hooper, Hollister, Nelson and Hamilton.

On motion of DR. LOVE it was ordered that Dr. Hollister be instructed to make such contracts as may be necessary for the conduct of THE JOURNAL, until the next meeting of the Association.

At 11:45 A.M., the Board called at the Executive Mansion and paid their respects to the President of the United States.

On motion the Board adjourned subject to the call of the President.

JOHN B. HAMILTON, Sec.

TOPICS OF THE WEEK.

CEREBRO-SPINAL FEVER.

This disease causes annually between 400 and 500 deaths in the State of New York. In 1889 there were 400 cases distributed over less than 100 localities, and including 20 out of the 30 cities of the State. It is a remarkable fact that although New York reports deaths from cerebro-spinal fever every month in the year, not one is reported from Brooklyn. In fact, since 1884, there has been but a single death reported from this cause in Brooklyn. By statistics it is shown to be a disease occurring at all times of the year, its greatest prevalence being in the spring months, and the least prevalence during the summer. The uniformity of its existence is noteworthy. No other disease is so constantly present, as shown by its mortality. Another notable fact is the steadiness with which it clings to a locality in which it has become settled. In New York, Buffalo, and Troy it is epidemic, while in other towns it has occurred in an epidemic manner. As to the causation of the disease, nothing very definite is known. A morbific principle seems to inhere in the locality affected, but what the conditions are which favor this inherence is not known. It clings to large cities, and with equal persistence to rural villages. A high level of the ground-water has been observed to exist in districts chiefly affected, and therefore it is proposed, as a remedial measure, that such places ought to be drained. The co-existent prevalence of pneumonia with cerebro-spinal fever, two diseases frequently associated, could not be recorded.—*Tenth Annual Report, New York State Board of Health.*

EARLY RISING AND LONGEVITY.

Professor Humphry's recent Collective Investigation Report on Aged Persons, contains some very positive evidence on a matter which has already engaged the attention of moralists as well as physicians. "The opportunity for nutrition to do its restorative work was in nearly all provided by the faculty of 'good sleeping,' to which was commonly added its appropriate attendant, the habit of early rising." Thus there is a relation between early rising and longevity. No doubt many people will hastily seize upon the sentence just quoted, and employ it in edifying lectures or essays for the perusal of youth, or embody it in popular medical works. Important qualifications follow in Dr. Humphry's report, but they are likely to be overlooked. Doubtless the habit of early rising is, in itself, healthy; most of all, it is a good sign of health, when it evidently signifies rapid recovery from fatigue. Again, it usually denotes a strong will, the gift, as a rule, of a good physical constitution, or at least the safeguard of average bodily strength. Late risers are generally either invalids or persons of bad habits, idlers who are never free from other vices besides idleness. The nervous exhaustion which keeps a man wakeful throughout the small hours produces sleep late in the morning. This exhaustion is invariably due to one of several life-shortening influences, especially anxiety or indiscretion in diet or drink. Early rising is thus rather one effect of certain favorable influences, another result of which is longevity, than a cause of longevity. To turn a weakly man out of bed every morning at 7 o'clock will not prolong his life. It will be noted that by "good sleeping" Professor Humphry signifies quick sleeping, "that is, the reparative work which has to be done in sleep is done briskly and well." Here, again, we have an effect of a cause; but preventing a weakly subject from sleeping more than four or five hours nightly would not cause him to live long, but would rather tend to shorten his life. Equally important are Professor Humphry's observations which show that by "early" he does not entirely mean the time by the clock. The word "has a relative significance with reference to the time of going to bed. A person who retires to rest four hours after midnight and gets up at 10 A.M. may be strictly regarded as an 'early riser.'" Thus, early rising is synonymous in long life histories with short sleeping, which means rapid recovery from fatigue, a sign of bodily strength. These scientific facts in no wise contradict the alleged value of early rising as a practice to be cultivated by all persons in good health. It is excellent as moral discipline, and eminently healthy as a matter of fact. Most persons will eat three meals daily. When a man gets up late those meals will probably follow each other at too short intervals to be wholesome. When he is an early riser it will probably be otherwise. He can enjoy a good breakfast, and by the time for his lunch or mid-day dinner he will have an honest appetite again.—*Brit. Med. Journal.—Weekly Medical Review.*

CONCERNING POSSIBLE THERAPEUTIC USES OF HYPNOTISM.

I am not very sanguine as to the future of hypnotism as a curative agent in nervous or other diseases. According to my own researches—and those researches date back eight years or more—the method is vastly more limited than one would imagine from the exaggerated claims which have been of late advanced in its behalf by over-zealous medical men. Let me mention a few of those limitations. In the first place, only a certain (unknown) percentage of persons are amenable to the hypnotic influence; or, to express it more exactly, only a limited number of persons are hypnotizable with the present means at our command. Secondly, the effects obtainable are evanescent; for, unless we hypnotize the patient so often as to incur the risk of doing him an injury, we cannot hope to perpetuate the suggestions sufficiently to do any good.

From these considerations it follows that the permanent effects which one may hope to produce upon the material economy through this class of psychical forces must be insignificant. Functions may, it is true, be exalted or depressed for the time being, but qualitative changes in the structures themselves are impossible. The internal capsule, the thalamus, the motor convolutions, the sensory tracts in the cord once destroyed, are not to be restored by any form of interference. Moreover, a physiological substitution (in Bernheim's sense)

for these and analogous structures, seems well beyond the farthest bounds of physiological probability. Hence, as I have previously mentioned, all attempts to apply hypnotism to the treatment of organic diseases are opposed to sound thinking. Indeed, I regard such proposals as hurtful to science, and particularly medical science, inasmuch as the reputation of the profession for sound judgment is thereby greatly jeopardized. The facts which the advocates of such questionable methods have to present are still too few in number, and too meagrely substantiated, to form the basis of affirmative argument. What then is the position which hypnotism may be expected to assume in the neuro-therapy of the future? In my opinion, the *rôle* which it is destined to play is a subordinate one. In the light of its present and past history, I do not see how it can be otherwise. As an adjunct in the management of minor degrees of hypochondria, morbid apprehension, depression, and hysteria, it may sometimes be invoked, but then only as a collateral expedient, and largely with a view to rendering the patient more tractable and amenable to other elements in the plan of treatment. The aid afforded by an appeal to the expectancy of the sick is familiar to every physician; by invoking the aid of the hypnotic state such an appeal may be made with an energy which is not attainable while the patient remains in the ordinary mental condition. But, while the miracles recorded by enthusiastic writers make, like Munchausen's tales, entertaining reading, they are not likely to enter into the sober realities of the consulting-room.

In view of what we now know of it, hypnotism is to be dealt with by the physician; for it is evident that a competent medical man is alone in a position to judge of its real or imaginary advantages. Certainly, only such a man should be allowed by our statutes to invoke its assistance in the treatment of diseases, however insignificant.—J. Leonard Corning, *Med. Record*, November 8, 1890.

THE CLINICAL USE OF THE PHONOGRAPH

has been attempted in this country, but without very great results. Better success seems to have been obtained in London. The *British Medical Journal* says that Mr. Ernest Hart recently suggested to Colonel Gouraud that the phonograph might with great advantage be employed to record the characteristic changes in voice-sound which mark a variety of diseases, such as whooping-cough, laryngismus stridulus, and the characteristic forms of dysphonia indicative of some forms of hysteria, and partial paralysis of the vocal cords, dependent upon pressure upon the recurrent laryngeal nerve. This suggestion Colonel Gouraud readily acted upon, and Dr. Felix Semon kindly consented to select from his patients at St. Thomas's Hospital a few cases in which pathological varieties of phonation were present. This was carried out with great success, and on Tuesday night, at a social gathering at 38 Wimpole street, at which a considerable number of eminent medical men happened to be present, the phonograph reproduced the characteristic vocalization of some of these diseases with the most realistic effect. The whoop of whooping-cough, with the intervening cries of the patient, were as vividly reproduced as if the child were in the room, and so also were the hoarse utterances of a case of stenosis of the larynx. The opinion was generally expressed that this new application of the phonograph to the purposes of diagnostic and clinical instruction constituted a solid gain for teaching, and probably for many other purposes. —*Medical Record.*

IMMIGRANT DERMATOSES.

Dr. James C. White calls attention to the fact (*Journal of the Cutaneous and Genito-Urinary Diseases*) that immigrants import skin diseases into this country. First there are those skin affections which are directly caused by life on shipboard; then there are those induced, after arrival, by influences not previously operative; and finally the direct importation of diseases more prevalent in other countries. In the last class may be included scabies, favus, lupus, leprosy, melanosis lenticularis progressiva, and prurigo. The author states that unless some more stringent laws are made to keep out of our country the pauper and dirty populations of Europe, the direct importation of the diseases we have been considering, and those which may arise as well from the filthy habits they bring with them and transmit to their children, must follow with increasing magnitude. To obviate such a condition the following measures are suggested: 1. To cleanse all immigrants of animal parasites on landing by treatment of person and clothing. 2. To retain in quarantine all immigrants with other contagious diseases, including venereal affections, a sufficient time for treatment. 2. To return to their homes all persons affected with such contagious diseases as it is impracticable to treat in such a way, as leprosy, tuberculosis, and advanced syphilis. 4. To provide for efficient medical inspection of foreign ports of emigration, with the power of arresting importation of dangerous diseases to this country.—*St. Louis Medical and Surgical Journal.*

PYOCTANINE.

The aniline colors have among them several members of the fraternity of antiseptic substances. Pyoctanine is the name of the violet and yellow members. Other aniline colors will probably assert their properties in that line within a short time. Heretofore we could often find out to what antiseptic substances a surgeon was partial by the various odors that permeated him as with a garment, but at present the hues that variegate his hands will give him away. Members of the profession that are endowed with an artistic eye will be able to dress wounds with picturesque effect. Too liberal an employment of primary colors will be described as rather harsh treatment. There will be simple, steady, reliable elderly gentlemen who will be content with a monochromatic dressing, while others, often of lesser years and more æsthetic tendencies, will stake their reputation and their patient's welfare upon an application of substances cunningly mingled, so as to resemble more in general effect the every day patchwork quilt of our aunts and the coat of Joseph. —*International Jour. of Surgery.*

PRACTICAL NOTES.

MR. HUTCHINSON'S TREATMENT OF RINGWORM.

Mr. Jonathan Hutchinson gives, in his *Archives of Surgery*, the prescription upon which he has "settled down in tolerable content" for the treatment of ringworm, after having tried a great variety of remedies without equal satisfaction. He relies chiefly on chrysophanic acid. He orders as a wash for the scalp one drachm of Wright's liquor carbonis detergens to the pint of hot water. Twice a week the scalp should be well washed with this, and all scales and crusts should be removed. The hair is cut close or shaved. The chrysophanic-acid ointment contains a drachm of chrysophanic acid, twenty grains of ammoniated mercury, a drachm of lanoline, six drachms of benzoated lard, and ten minims of liquor carbonis detergens. This ointment is to be rubbed in more or less freely, according to its effects, night and morning, or latterly every night only.—*N. Y. Med. Journal.*

PREVENTION OF THE TOXIC EFFECTS OF COCAINE.

Dr. Gluck (*Med. Rec.* June) writes on this subject. He uses a combination of cocaine and carbolic acid, dissolving two drops of the acid in one drachm of distilled water, and then adding ten grains of cocaine hydro-chlorate. Carbolic acid is itself an anæsthetic, and as it coagulates albumen and forms a superficial eschar, it prevents the rapid absorption of cocaine. He claims that the anæsthetic effects of cocaine are increased by this mixture, that its toxic effects are prevented, and that the solution is rendered aseptic.—*Review Ins. and Nerv. Disease.*

PHENACETINE.

Thompson says: In any given case of nerve pain where one might suspect a weak or fatty heart, phenacetine is to be preferred to antifebrine. It does not seem to act quite so surely as the latter, but after using three and a half ounces of it, I much prefer it to antipyrin. Such is my experience of phenacetine, after a fair trial. In seven or eight grain doses every four hours, it is a safe and effectual remedy in all neuralgias, be they in the head, back, or any other part of the body.

Rifit (*Bull. de Ther.*) reports very favorable results from large doses of phenacetine in acute articular rheumatism, particularly that of gonorrhœal origin. He gives the fifteen grains every three hours the first day, increasing the dose the following day, until the pain is relieved and the joints become movable. This occurs as a rule when six or eight doses per diem are given. These large doses are continued for three days longer, then gradually reduced to three times per day fifteen grains one week longer, and then omitted. Treatment by this plan reduced the time to twenty-one days, while that by the salicylate is thirty-five, and by antipyrin twenty-five days. In twelve cases so treated no heart symptoms were noticed. Relapses are unusual if the above plan is followed.—*Times and Register.*

IMPURITIES UNDER THE FINGER NAILS.

We are all, doubtless, familiar with the common belief of people in the poisonous properties of the finger nail. We have, indeed, ourselves seen some severe inflammations caused by the scratch of a nail. So general a belief must, according to Herbert Spencer, have something of truth, and modern bacteriology has furnished the demonstration. It is not the nail *per se*, of course, that poisons, but something that is on or under the nail. Seventy-eight examinations were recently made in Vienna (says the *British American Journal*) of the subungual spaces, and there were found: of micrococci, 36 kinds; of bacilli, 18 kinds; of sarcinæ, 3 kinds, and common mould spores were very often present.

Personal cleanliness should be insisted on in everybody, but how necessary is it for the surgeon. Antiseptics can never and will never successfully *take the place* of soap and water and the scrubbing brush, but as additions to this process they must, in the light of the demonstrations before us, be henceforth forever included in the routine practice of the conscientious surgeon. The habitually clean will, of course, have less trouble in the preparation of the hands, but the necessity for attention to details in the cleaning of the hands and nails has now been made plain by the valuable experiments of Furbringer, confirmed by many others and the practice of surgeons like Billroth, who now adopts the suggestions of these investigations in his operative work.—*New Orleans Med. and Sur. Journal.*

CREASOTE IN DIABETES.

The *Lancet* says, two cases of diabetes have been treated with excellent results by Valentini, by means of creasote administered internally. In one case, four drops per diem were given at first, this quantity being afterwards increased to ten drops. Under this treatment the sugar disappeared, and did not return when the patient began to eat starchy food. The other patient was given six drops per diem, and did equally well.

ANÆSTHESIA IN SMALL OPERATIONS.

For this purpose Dr. A. Dobisch, of Zwittau, recommends spraying the parts for one minute with the following: Chloroform, 10.00, ether, 15.00, menthol, 1.00. This produces complete anæsthesia of the skin lasting from two to six minutes.

SOCIETY PROCEEDINGS.

The Gynecological Society of Boston.

214th Regular Meeting.

THE PRESIDENT, W. SYMINGTON BROWN, M.D., IN THE CHAIR.

DR. JESSE F. FRISBIE read the following paper, entitled:

A PECULIAR CASE.

On the morning of March 31, 1888, I was hastily summoned to the bedside of Mrs. P., the beautiful and accomplished wife of one of the most enterprising young men of Newton. I was informed she had been suffering very severely all night with pains and cramps in the bowels. I was also informed that she was a little more than seven months pregnant. She had been married about two years and this was her first pregnancy. Her age was 23 years.

When I first saw her the pains were regular, and she appeared very weary and worn from sleeplessness and suffering. I at once diagnosed premature labor, and upon making a digital examination found the os dilated and the fœtus nearly half expelled—a footling presentation.

In the course of an hour I succeeded in removing a male fœtus and the placenta. There was hardly the slightest tinging, with blood, of the rather scanty secretions, and of "waters" there had been practically none, so slight had been the moisture at the time the membranes ruptured. The fœtus corresponded to the size of one five and a half or at most six months, shrivelled and shrunken, and in an advanced stage of disintegration, if that term can be used without indicating decided decomposition. There was but little odor of putrefaction, but I could, with my fingers, as easily pick the skin and tissues from the body as I could had it been thoroughly cooked. The placenta was rolled into a ball, hard and compressed, bloodless and friable. The appearance of fœtus and placenta presented unmistakably the condition of a fœtus that had been dead many weeks. The rolled up, compressed and bloodless placenta, and the absence of blood and amniotic waters, were caused by the gradual contraction of the uterine walls during the weeks following the death of the child. There being, during this period, no flow of blood to the placenta or child, absorption of blood and waters had gone on as uterine contractions took place.

Further investigation revealed the following history: The patient was a native of Nova Scotia. For several years before her marriage she had suffered from some uterine disease for which she had received little or no regular treatment. She had suffered at times from acute nephritis, and at this time there were ample evidences of a chronic nephritis, the effect of the acute attacks referred to. In addition to these she had a weak, and at times a painful and irregular heart. These two last may have been inherited from her mother, as I found (upon her becoming a patient of mine), that she had suffered from the same diseases for many years. After her menses appeared, which was at the age of 13 years, she had been more or less hysterical. Notwithstanding all these complications my patient was a well developed and rather fleshy young woman.

She had suffered from the usual attendants of pregnancy, and also from a circumscribed, sensitive and sore spot to the right of the median line, below the umbilicus, apparently nearer the uterus than the right ovary. This she had been troubled with, at times, previous to conception. Some four or five weeks before I was called to attend her, she had met with an accident—a fall—striking upon the back near or below the kidneys. From the effects of this fall she had suffered, more or less, all the time till her confinement. No movement of the child had been felt after that fall, and she was not sure that motion had been felt for a little time previous. The os uteri, which was only partially dilated, presented to the finger the decided appearance of inflammation, or perhaps excoriation, and in my opinion the slight traces of blood, seen at time of confinement, were caused by the blood being forced out from the os or its neighborhood, as the parts dilated and the child was pressed down and expelled. The after-pains were quite strong, and the uterus readily contracted to the size of a small orange.

For weeks she had suffered from uterine pains almost daily, sometimes quite severe. She supposed these to be abdominal pains consequent upon her condition and to be naturally expected, and the entire night before her morning delivery she had suffered intensely with the same kind of pains, the only difference being in degree. She hardly more than had a suspicion that labor had begun. Even this suspicion was repugnant to her, as she was very anxious to bear a living child. In fact, during a thirty years' practice, I have never seen a woman who appeared to desire a child so much, and the loss of which occasioned so great disappointment and grief.

Taking into consideration the past history of this patient and the conditions existing at time of delivery, I naturally felt grave apprehensions as to the future outcome of the case. Accordingly, from the first the treatment was thoroughly antiseptic. Absolute cleanliness was insisted upon and as far as possible carried out. The vagina was douched twice a day with a solution of carbolic acid in water—1 to 40—as hot as could be borne, at the same time sponging the external parts with the same solution. The bowels were kept open with gentle aperients and enemas.

For several days everything seemed to progress satisfactorily. On the fifth day after delivery a

severe chill occurred which was immediately followed by high pulse, and temperature accompanied by a heavily furred tongue and rapid sinking of the heretofore good spirits and stamina. Apparently the cause of this sudden break down was the communication to her of the sad news that a near relative of hers, in her own home, had died after a few days' illness. Immediately thereafter the sensitive and tender spot in the right side, to which reference has been made, became exceedingly painful and continued to cause great suffering for many weeks. At the same time the right leg became tender and painful from the body to heel, and the suffering at times was almost greater than she could bear. Swelling supervened with the general appearance of phlegmasia dolens. Accompanying these, although at first with rather obscure symptoms, septicæmia developed and my poor patient seemed to have the whole decalogue of diseases. As the days passed on and she grew gradually weaker there was almost a constant pain at the heart which caused her great distress.

Fearing from the first that septicæmia might develop my whole treatment had been antiseptic and supporting. The bowels had been kept open by enemas and the little strych. et belladonna pill. Quinine, brandy, wine, etc., were given for supporting tonics and morphine, by mouth; hypodermic and vaginal suppositories to relieve pain.

With the development of septicæmia the uterus became hot and very tender, while a profuse discharge kept the nurse busy. Every three or four hours the vagina was thoroughly douched with a hot solution of carbolic acid. But for these precautions the odor would have been unbearable, and even with them, at times the smell did not remind one of a peach orchard or breezes from Araby the Blest. Tincture of iodine and hot fomentations to which tincture of opium was added were freely applied to the abdomen. Liniments of soap, laudanum and arnica were applied to the leg. About the third week from the confinement I called Dr. H. O. Marcy in consultation. He coincided with the treatment, suggesting in addition the use of iodoform suppositories. These were freely used to decided advantage.

At the expiration of two more weeks the patient was able to sit up. A little over-exertion, with perhaps a slight cold, and a relapse followed. The pain in right side and leg returned and became very severe. The pain at the heart also gave her intense suffering. But there was no return of the uterine discharge as it had been three weeks previously. After the most careful examination, I could not discover any lesion of the heart except weakness, and sometimes a little irregularity in beat—functional rather than organic.

About this time meddlesome and over officious friends insisted upon another consultation. The husband yielded and Dr. J. H. Chadwick was called in.

After making a careful examination and finding the uterus easily movable, at about normal temperature, and the general condition of the patient satisfactorily improving, he informed the husband and friends that they were unnecessarily scared about nothing, and recommended a practical continuance of the treatment then in force.

She continued to improve, and with the occasional use of tr. of digitalis and acetate of potash, combined with triticum repens, made a good recovery, with the exception that the circumscribed spot on the right side still remained sensitive and at times painful. Several months after, she had leucorrhœa for which was ordered a douche of hot water to which was added zinci sulph. or cupri sulph. in small quantities, once or twice daily with excellent results. Other local treatment was advised but not carried out.

A year and a half after her confinement she conceived again, and on the 29th of last November I delivered her of another 7 months' child—alive—which weighed 2¾ pounds and lived four weeks. A few hours after her pains began she had a convulsion which was followed by five others during the succeeding ten hours, and convulsive twitchings about face and neck for four or five weeks. The first two days she was unconscious and that time has ever been a blank to her. The first of these convulsions occurred on Tuesday morning and the child was born on Thursday morning.

Chloroform was at once administered and Dr. H. M. Field called in consultation. Afterwards hypodermic injections of morphia were given frequently till the convulsions ceased. For reasons which have now escaped me, we did not deem it judicious to dilate the os and deliver. If my memory serves me the os was then not dilated to the size of a ten cent piece. The bowels had been thoroughly evacuated by enemas long before the convulsions occurred. After the convulsions ceased she was fairly comfortable till her delivery. The pain in side and leg reappeared in a few days, but not to so severe an extent as at the previous confinement.

About three weeks after her confinement the tumor (?) fibroid or fibrine, which I now exhibit to you, was expelled, without any pain and without her knowledge, from the uterus. From that time she made a good recovery. To her and my gratification the circumscribed tender, and at times painful spot in the side has ceased to trouble her, from the time this tumor was thrown off. She is now in comparative health.

DR. GERRY said that he had been much interested in the paper. He thought that the patient had suffered from septicæmia and from the treatment he had noted the absence of curetting. He

believes that it has been stated that septicæmia comes on if at all about the third day and so he suspects if there is a rise of temperature then and intra-uterine treatment should be substituted.

DR. CONWAY stated that he seldom uses antiseptic treatment in midwifery; in fact he has only used it twice in treating 1500 cases and neither time was he satisfied with the results. Cleanliness, however, is all important and it is on this that he relies.

DR. ELLIOTT mentioned the case of a lady whom he had delivered the day before. She had a history of having been delivered two years previously and having a temperature at that time of 103° and 104° F. and later she had typhoid treatment in the City Hospital. For four days before this last delivery her temperature was 104° F. and her pulse was 120, but as soon as she was delivered the temperature came down to normal.

DR. STEVENS remarked that his experience had been a little different from Dr. Gerry's in that he has found that a rise of temperature on the third generally means that the flow of milk is being established, and further that when septicæmia is present it frequently comes on not till the fifth to sixth day and it may be delayed until the seventh day.

DR. KELLER asked if a microscopic examination of the specimen had been made? [answer by Dr. Gerry—No]. The Doctor then remarked that septicæmia comes on later than the third day, but yet if a chill comes with a rise of temperature on the the third day, then look out.

DR. BROWN, the President, said that he had enjoyed the valuable paper very much. The question arises, was the death of the first child probably due to this tumor. This he thinks is not the case. The woman was delicate and this tumor is probably a submucous fibroid. Septicæmia generally comes from the fourth to the seventh day but there is no regularity about it. The idea now prevails that there is no such thing as milk fever as such and that the rise on the third day is due to a commencing septicæmia.

DR. FRISBIE in conclusion said that the womb contracted to about the size of a small orange within a few hours after delivery. As all of the membranes came away he had no suspicion of anything wrong and so there was no indication for the curetting, etc., that had been mentioned.

THE INTELLIGENT FOREIGNER ON BRITISH PIETY.—According to the *Zeitschrift des Oesterr. Apoth. Vereins*, a special prayer-book for medical men has just been published in England. It contains a selection of suitable prayers for delivery on the occasion of surgical and other operations. There should be a companion prayer-book for the patient.

FOREIGN CORRESPONDENCE.

LETTER FROM PARIS.

(FROM OUR REGULAR CORRESPONDENT.)

The Chirurgical Treatment of Tuberculous Peritonitis.

At a meeting of the Chirurgical Clinic at the Hôpital de la Salpêtrière, M. le docteur Terrillon took for his lecture the following interesting study, viz.: "The Chirurgical Treatment of Tuberculous Peritonitis." A report of this lecture is just published of which I here give the contents.

We are about to study to-day an affection which has for a long time almost exclusively belonged to medicine, but which falls more and more under the dominion of surgery. I wish to speak of tuberculous peritonitis, of which we have, at this moment, an interesting example in our hospital.

You have been able to see, just now, in my ward, a young girl of sixteen years, pale, meagre, who presents a particular deformation of the abdominal region. The stomach is globulous, pointing forwards, as that of a woman affected with a cyst of the ovary. To profile, especially, this analogy is striking.

When one feels the abdomen, one becomes easily enough sensible of a rounded mass, as globulous, which fills it entirely. The surface of this mass is not smooth as that of a cyst of the ovary, but granulous and irregular.

If one control by percussion these data furnished by the palpation, one is astonished to find everywhere a quantity of sounding bodies. There is only then in some sort an appearance of tumor.

If we touch afresh the abdomen, in order to examine it more carefully we shall then be able to perceive two new signs which will aid us in forming the diagnostic: There is, firstly, a sensation of snowy friction that one perceives in depressing lightly the lateral parts of the stomach; in the second place, some little grumblings of the bowels provoked by the profound pressure, one describes them under the name of "intestinal cries."

In presence of these phenomena, in order to assure to the diagnostic a greater precision, we have submitted the patient to the chloroformic anæsthesia. Once the muscular resolution obtained, we have proved that the abdominal wall relaxed itself a little. The appearance of abdominal tumor becomes less clear to the palpation, but one feels the small hard granulations, disseminated on the surface of the intestines. In the left flank, and more particularly in the right flank, one finds two or three masses of about the size of a mandarin. The peritoneal friction is found again upon nearly all the points of the stomach. We have equally practiced the rectal touch, which has not given us any important token.

Thus, in this case, we are in presence of an affection of peritoneum having provoked a secondary contracture of the muscles of the anterior abdominal wall, contracture which gives place to an appearance of tumor. This is, besides, a fact well known and that one observes in many circumstances, and I have been able to show you, some time since, several hysterical women who have been sent to me with the diagnostic of cyst of the ovary, and who had in reality, only contracture of the abdomen with tympany.

Nevertheless, between these abdominal symptoms of simulating hysteria, a tumor and the actual case, there exists a capital difference. With the nervous the appearance of tumor disappears completely under the influence of anæsthetic sleep. Here, on the contrary, the stomach, in becoming altogether more supple, presents, under the wall, some hard, resisting parts, superficial with respect to the intestine; that which indicates a lesion of the peritoneum.

Our patient is then affected with a tuberculous peritonitis. Her clinical history comes besides to the support of the physical exploration in order to confirm the diagnostic.

She has always been unhealthy and pitiful. Three years ago, she had already suffered during several months, of the stomach, at the same time she complained of vomitings and of diarrhœa. Her affection probably dates from this epoch. Afterwards, all had resumed its original order, when in the month of January last, the same troubles have reappeared, with more violence, at the moment of the appearance of the menstrual discharge. The patient has, since this period, suffered from sharp abdominal pains; some frequent and returning vomitings during several days, afterwards discontinuing, have much fatigued her. Finally, she has presented some alternatives of constipation and of diarrhœa. Since about a month, she has been ordered to keep her bed.

In presence of these functional troubles, the doubt is no more possible: we have to do with an unlooked for tuberculous peritonitis, without appreciable cause, in a young girl, and this is a fact frequent enough.

It rests with us to discuss the treatment that we ought to institute for this patient. But before doing so, I wish to describe to you, in some words, the lesions of the tuberculous peritonitis, its march and its complications.

I will not insist on the pathological anatomy of this affection, and I will only recall to you the particularities thereof which are essential to know in a surgical point of view.

You know that, when one examines at the autopsy, or at the course of a laparotomy, a tuberculous peritoneum, the lesions show themselves under two aspects very different.

In the first case, the parietal serous, as the visceral serous, is recovered with tuberculous granulations. These granulations remain often isolated as a seed bed to the surface of the peritoneum, and provoke an ascitic effusion more or less abundant. This form of tuberculosis has received the name of "ascitic form." Sometimes this ascitic tuberculous peritonitis presents some characters enough specious. At the same time as the ascites, are produced some false membranes which partition the effusion in several isolated bags. It is then than one often confounds peritoneal tuberculosis with an abdominal tumor, above all with a cyst of the ovary.

The second form is more rare; it is characterized by the absence of liquid, thus it has received the name of "membranous form." In this case, the tuberculous granulations, in irritating the peritoneum, have provoked the production of false membranes which retie the intestinal ansæ and the large epiploon in an irregular mass adherent to the abdominal wall. In these plastic, membranous forms, are often formed some centres of encysted suppuration, of which the volume is sometimes considerable.

The march of the malady is no more susceptible of a uniform description. In the great majority of cases, tuberculous peritonitis is a chronic affection; but it is not rare to see it commence by an acute state, as with our patient, and present successively some remissions and some outbursts. Nevertheless the ascendant chronic march accompanied with accidents of the side of the intestine, is the most common.

An important fact, upon which I desire to insist, is that habitually tuberculosis rests limited to the peritoneum, and does not invade the other organs, at least during several years.

You comprehend the great importance of this fact in a surgical point of view, for if the lungs, for example, are affected, there is then a contra-indication to all operation.

I tell you, that these unfavorable circumstances are relatively rare. Notwithstanding they are able to present themselves, and I will on this account cite to you an example which will show you the embarrassment in which the surgeon can then find himself: Three months ago, I was called in consultation concerning a young officer who presented sometime since abdominal phenomena quickly developed: balloonment of the stomach, vomitings, diarrhœa. One found by this patient the sensation of peritoneal friction of which I have spoken to you. I diagnosed a tuberculous peritonitis, but, in spite of the persistence of the patient and his surroundings, I refused all intervention, for there existed at the two summits of the lungs hollow sounds, and some humid cracking noises and, more, some profuse perspirations. My intervention would have been useless, for it concerned a tuberculosis of rapid march. The patient died, a few days after, from the progress of the

affection which was accentuated as much on the side of the lung as on the side of the abdomen.

I desire also to call to your observation that tuberculous peritonitis develops itself nearly always in young persons and even in children, principally between the age of 12 and 20 years. The patients that I have latterly attended for this disease, were 12, 17 and 18 years of age. It is well to remember, however, that, in spite of its frequency at this age, it is able to reappear later, towards 30 or 40 years. You will find, in a thesis, very well made, of Dr. Hemey (1866), some examples of tuberculous peritonitis in the adult, independent of other lesions.

Finally, what is the termination of the malady? I have not considered it necessary to tell you that its prognostic is unfortunate and that, if one does not intervene, the patients finish always by succumbing to the progress of the affection. The fatal termination can be hastened by some complication. There is thereof one which, although rare, ought to interest us particularly. These are those facts of pseudo-contraction, that one finds sometimes in the course of the peritoneal tuberculosis. I have lately observed thereof a case, which I will relate to you:

In 1887, a young girl entered into my ward at the Salpêtrière, with some phenomena of intestinal occlusion enough marked: balloonment of the stomach, fæcaloid vomitings, contracted features. According to the antecedents of the patient and the abdominal palpation, I thought it to be a tuberculous peritonitis, and as the phenomena of contraction ruled the scene, I practiced laparotomy. I found some tuberculous lesions of the peritoneum very extended, but especially important to the level of the S iliac. There were there some granulations so abundant that the visceral peritoneum had the thickness of the little finger, and flattened the intestine against the wall of the basin. I tore this neo-membranous production upon several points, not being able to displace it entirely. Besides, I practiced some punctures of the intestine, with the apparatus of Potain, in order to clear it of the gases that it contained. This intervention brought a notable relief to the patient, but she died, three months after, of generalized tuberculosis.

It only remains to us, now, to study the treatment of tuberculous peritonitis.

Formerly, one only opposed to this affection a medical treatment: vesicatories, unguent Neapolitan, revulsion. One succeeded thus in easing the patients, under all its forms, but not in curing them. Fifteen years ago, Kœnig, making an error of diagnosis, practiced a laparotomy, believing to be in presence of a cyst of the ovary, and fell upon a purulent bag of tuberculous peritonitis. He cleansed it with care, closed the abdomen, and was quite astonished to see the healing persist after this operation.

Examples of this species multiplied themselves very soon, and the interventions in some cases of unsuspected tuberculous peritonitis did not fail to be numerous. Finally, surely, it is no more hazard, but by fixed resolution that one opens the abdomen in cases where this affection has been acknowledged. There exist actually many observations of this kind. We find, in a communication made before the Italian Society of Surgery in 1889, by Cecherelli, of Parma, the summary of eighty-five published observations, which have given the following results, after surgical intervention for patients affected with tuberculous peritonitis: healings, 52; deaths, 25; ameliorations, 6.

This intervention can take place under two circumstances very different. When there is ascites or when there are some purulent encysted bags, the intervention is quite natural. Truly, it is most frequently in this case that one has practiced it, and nearly always with success.

The operation consists in opening largely the abdomen. When one has proved the presence of tuberculous lesions, the purulent or ascitic bags are emptied. It is afterwards necessary to practice a minute cleansing of the abdominal cavity with sponges soaked in an antiseptic solution, such as those of thymol and of phenic acid. I generally use a solution of phenic acid.

It was in these conditions that I have operated upon a young girl, last year, who was affected with tuberculous peritonitis of ascitic form. After having incised the abdominal wall on a length of 12 centimetres, I fell upon an ascitic effusion of 7½ litres. I raised with care the totality of this liquid, and touched all the points of the peritoneal surface with sponges imbibed with a phenic solution at 200. The abdominal wound was sutured and a large drain put in its inferior angle. I left this drain in place thirty-six hours, and during this time there flowed out at least 1½ litre of liquid. The abdominal reuniting was perfect, and the reëstablishment of the patient complete. Since, I have been informed that the healing is well maintained.

I have also had occasion to intervene, at the same epoch, for a purulent encysted tuberculous peritonitis. It concerned a young girl of 11 years, in whom one had diagnosed a pericæcal abscess. The bag, that I incised, was filled with tuberculous granulations and with yellow and thick false membranes. She was cleansed with a phenic solution at 1–20. Afterwards I made the suture and instituted the drainage. For a year the healing has been maintained.

In sum, with tuberculous ascites, be it generalized, be it encysted, surgical intervention gives place to perfect results.

Even as we have already indicated it, this form of tuberculous peritonitis is the most frequent; so it is our duty to examine if one ought to intervene in the other cases; that is to say, in those where

the peritonitis has a dry or membranous form, as that which exists in our patient. The greater part of the surgeons think that it is preferable to abstain in this case, on account of the extended adherences uniting the intestine and the epiploon, and hindering to penetrate largely into the abdominal cavity. M. Truc, in his thesis of aggregation (1886), advances this same opinion. It is, really, difficult to understand if in simply tearing some false membranes, one is able to make an intervention useful to the patient.

I have been able, besides, to find in medical literature some observations of this kind; but I have personally observed a fact which permits me to conclude in favor of the utility of laparotomy, even in these unfavorable circumstances. This history is most interesting; so permit me to describe it with some details: It concerned a young girl of 18 years, who was sent to me, in 1886, by M. le Docteur Duffau, of Laon (Eure-et-Loire) and by M. le Professeur Lannelongue. She had a projecting stomach, voluminous, and to the palpation as well as to the percussion, one had the sensation of a solid tumor adherent to the abdominal wall. I thought it to be a sarcoma developed in this wall, and I decided to practice laparotomy. This operation was made in March, 1886, in presence of M. Lannelongue. The abdominal wall was abnormally vascularized, very bleeding. I arrived upon the peritoneum, thickened and adherent. It formed a sort of breastplate of the thickness of the hand, composed of a tissue of false membranes infiltrated with tuberculous granulations. I incised it largely. I sought afterwards to separate the false membranes which agglutinated the intestinal ansæ among them, but I was not able to arrive there. I was obliged to close the stomach, little satisfied, I confess, with my intervention.

The operative results were benign: the fifteenth day, the patient rose. At the end of twenty-two days, she departed for the country.

I thought that she had certainly soon succumbed to the progress of this affection, when I learned, a year after, from her physician, that the patient was much better. At the end of eighteen months, the patient came to see me at the Salpêtrière, and I proved, to my great surprise, that she was completely healed. The stomach was supple and appeared absolutely normal.

This fact is so surprising that one has the right to ask oneself if it be really the surgical intervention which has healed the patient, or if the affection has not made this retrocession of itself. I believe, for my part, that there is in laparotomy an empirical side that we shall ourselves explain perhaps still later, but which we are only able in effect to prove. I am, however, persuaded that the operation has had, in this case, a favorable influence.

I will cite to you, besides, some examples of healing for analogous peritoneal productions, which I have observed several times. It is even so, in numerous cases of ancient salpingitis, having provoked some years since some outbursts of pelviperitonitis, laparotomy demonstrates that the basin is filled with false membranes uniting the intestinal ansæ among them, and that the tumor is so adherent that one is not able to displace it. The surgeon contents himself then with making movable as much as possible the intestine and the epiploon, he cleanses with care the surfaces thus torn and closes the abdomen. In these examples, I possess thereof four, well defined and quite authentic. Not only the chirurgical intervention relieves the patient, but one sees shortly after, the impotence produced by these membranous formations disappear and the intestine retake its normal functional state.

Lastly, I have made before you an operation of this kind upon an overseer of the Salpêtrière. The relief has been so considerable that the patient has been able to resume her occupation, though laborious. Nevertheless, I had not removed any of the affected organs; I had only destroyed some adherences.

Thus, in the presence of these facts, I shall not hesitate to practice a laparotomy on our little patient. We have placed to her the diagnosis of tuberculous peritonitis; we know within a little what are the lesions that we shall find at the opening of the peritoneum, and I believe that she will benefit much by an operation. It is the right and the duty of the surgeon to practice this intervention, which is besides, for the patient, the only chance of salvation.[1] A. M. G.

LETTER FROM LONDON.

(FROM OUR OWN CORRESPONDENT.)

Prof. Koch and his reported cure for Consumption—The Tortoise Field Hospital Equipment—Medicinal Rings—Hydro-chlorate of Glutin-Peptone—Miscellaneous Gleanings.

Professor Koch's reported cure for consumption arouses intense interest and expectation in the Teutonic medical world. After long experiments Dr. Koch has so far perfected the discovery that he will give a full account of his method in a public lecture at the December meeting of the Berlin Medical Association. He does not expect to cure patients in an advanced state of the disease, because other parasites have then attacked the lungs while his remedy only kills the tuberculosis bacillus. But he is certain of success in the early stages, his process being curative, not

[1] The patient was operated on May 5, 1890, and presented to the Society of Surgery June 18 last. A large incision upon the median line gave access into the peritoneal cavity, filled with false membranes and granulations. Several intestinal ansæ were liberated. The wound was closed without drainage. The patient has given news of herself by letter October 1, 1890, and declares herself to be absolutely healed.

preventive, like vaccination, although it resembles the latter process by lymph being injected under the skin. Eight persons are now undergoing the cure at a Berlin hospital. The Government will establish a Bacteriological Institute to enable Dr. Koch to carry on researches. At present the remedy is only produced at great expense, so a private society is being formed to monopolize the manufacture under Dr. Koch's management and to furnish funds for supplying the lymph to the poor.

The arena of the Chelsea Hospital Grounds, has just been occupied by the Military Equipment, Stores and Tortoise Tent Company, the directors of which had invited a company of experts to inspect a number of ingenious appliances necessary to the active operations of an army in the field. The company is principally interested in the Tortoise Field Hospital Equipment, the invention of Captain Tomkins, which has already gained the Empress Augusta's gold medal, and first prize at Berlin in 1889, a gold medal of the Liverpool Military Exhibition and many others. The principal aim of the inventor is to produce a ready means for the shelter and treatment of the sick and wounded as near to the field of battle as possible, which while containing nearly all that may be required for a field hospital will at the same time have the greatest mobility as a field flying hospital. The Tortoise hospital is contained in four wagons, and is capable of being removed from the wagons and carried on pack animals. In a mountainous country it may be carried by the Bearer Company or fatigue men on the stretchers, which form bedsteads in hospital. The whole hospital consists of 54 or if necessary, 60 beds carried in three wagons, each wagon being in itself complete with 18 or if necessary 20 beds, as a third of the hospital. For the medical staff and attendants a smaller four-wheeled wagon contains tent accommodation with beds for two surgeons, two superintendents, six nurses and one cook, together with all the requisite appliances. The weight of the three wagons when packed is 4,800 pounds including packs and panniers, requiring on military roads four horses at the rate of 11 cwt. per horse. The apparatus has already been used with considerable success in British Volunteer Camps, and a committee of the French war department is considering the question of adopting it throughout the army of the Republic.

There has recently been published for private circulation, a little work descriptive of medicinal rings which were at one time very seriously believed in. Physicians were wont to wear rings in which stones were set, and these stones were credited with the possession of many virtues. Sometimes it appears the patient was simply touched with the ring; sometimes he put his finger in it for awhile. Many a patient has worn such a ring to stop hæmorrhage. If the result followed, the ring was unreservedly regarded as the healing agent; if the cure did not follow, nothing is told about it. Also in the middle ages magic rings were worn bearing the names of three wise men who presented gifts at the birth of Christ. They were Melchior, King of Nubia, who gave gold, Balthazar, King of Chaldea, who offered incense, and Jasper, King of Tarshish, who brought myrrh. These rings were considered specially efficacious in warding off various forms of disease, more particularly cramps. A remnant of this superstition still remains in some country places where certain affections of the eyes are treated by rubbing the part seven times with a wedding ring.

Of recent years many preparations of mercury have been devised, intended for hypodermic injection, but so far all have exhibited undesirable features. It is now believed that a substance has been discovered which is, in the first place, effective while having as slight toxic properties as possible; and, in the second place, it is unirritating and causes very little pain when injected. The new salt is described as a hydrochlorate of glutin-peptone in combination with corrosive sublimate. By treatment of gelatine with dilute hydrochloric acid, a hydrochlorate of gluten-peptone is obtained, containing 12 per cent. of hydrochloric acid. This is entirely soluble in any proportion in both water and alcohol, and to it is added mercuric chloride. When trying the medicinal effect, a salt containing 25 per cent. mercuric chloride was used. Physically this occurs in white, glassy lamellæ, forming a hygroscopic powder. The aqueous solution is stated not to be precipitated by caustic alkalies, by the alkaline carbonates, by the blood nor by albumen. Both the solid substance and the solution may be kept in well stoppered bottles without decomposition for twelve months if the light be not excluded. Owing to its combination with peptone, the corrosive properties of the chloride are obviated to some extent, and the entire absence of sodium chloride is thought to be an advantage. The employment of the drug has now extended over a period of nine months, during which time sixty patients have been treated, 1,300 injections being given altogether. The dose is ⅔ of a gr., equivalent to ⅙ of a gr. of mercuric chloride. The investigations have shown the new remedy to have numerous advantages, which may be briefly stated: 1. It is certain and quick in action. 2. The injection is accompanied by very little pain. 3. As there is little irritation of the skin, a rash is not produced when the salt is used.

The National Health Society has organized a course of six lectures on home nursing. The lectures will be accompanied by demonstrations, and will be given at the new offices of the Society. The Society will also give a course of lectures on

cooking, especially making a feature of invalids' dishes.

The St. John Ambulance Association has recently been doing good work among the employés of the Great Eastern Railway Company. At a recent distribution of certificates, a demonstration was given by the members of the Railway Ambulance Corps, wounded men being taken from the compartments and from beneath a railway carriage and conveyed away on a stretcher. The work was most effectually done, and was highly commended by the officials of the St. John Ambulance Association who were present.

At the present time many medical students in London find considerable difficulty in obtaining the necessary facilities at their own schools for going through a course of operative surgery on the dead body. In view of this, the Royal College of Physicians and Surgeons and the Apothecaries' Society have decided to accept the certificates of operative surgery of the private School of Anatomy and Physiology, directed by Mr. T. Cook. The school has already been recognized for this purpose by the University of London and by the War Office for several years.

A new monthly journal devoted to hypnotism and kindred subjects has recently begun to appear in Italy.

The powerful representations made with regard to the rank and status of medical officers in the British Army have been considered at a conference held at the War Office, and the question of rank and title for medical officers is now receiving the personal attention of Mr. Stanhope. It is thought that the Medical Staff Corps will be created a Royal Corps, and that in official lists the names of medical officers will appear according to seniority, and not at the bottom as at present.

G. O. M.

DOMESTIC CORRESPONDENCE.

A Correction.

To the Editor:—Mr. J. Greig Smith has called my attention to my unintentional misstatement of his views on page 643 of THE JOURNAL, for November 1, 1890. I hasten to say, therefore, that a reference to his "Abdominal Surgery" shows that he has clearly stated that floating kidney is always congenital, but movable kidney as a rule is acquired. Very truly yours,

W. W. KEEN.

1729 Chestnut St., Philadelphia, Dec. 1, 1890.

NECROLOGY.

SURGEON-GENERAL JEDEDIAH HYDE BAXTER, of English descent, was born in Stafford, Orange Co., Vt., May 11, 1837. He was educated in his native State, receiving his medical degree in 1860. He then went to Washington, but in 1861 relinquished private practice and entered the United States service as Surgeon to the Twelfth Massachusetts Regiment, Col. Fletcher Webster. He was promoted to be Surgeon of the United States Volunteers in 1862, and was brevetted Colonel in 1865. In 1867, July 20, he was appointed assistant medical purveyor, and in 1874 was made chief medical purveyor, which office was created expressly for him.

He was a member of the Public Health Association, and American Medical Association, a corresponding member of the Boston Gynæcological Society and of the Philadelphia Academy of Natural Sciences. He was a contributor to scientific periodicals and the author of "Medical Statistics of the Provost Marshal General's Bureau." In 1876 he married Florence Tryon, daughter of the late William Tryon, of Washington.

On August 16, last, he was appointed Surgeon-General in the place of Surgeon-General Moore, retired. His friends had frequently urged his appointment to the office whenever a vacancy occured, and when Surgeon-General Barnes died in 1881 he was promised the post, but lost it through the assassination of President Garfield.

His death occurred from paralysis with which he was stricken on December 1, on the third day, at two o'clock in the morning. He was buried in Arlington Cemetery, five foot battalions, a platoon of light artillery and two troops of cavalry acting as escort. The War Department closed its doors on the day of the funeral.

DR. PROCTOR THAYER, formerly professor of surgery at the Cleveland Medical College, died October 1, in the sixty-seventh year of his age. He was a native of Williamstown, Mass. For about 50 years, with exception of a part of two years during the late war, he was connected with the Western Reserve College, or one of its departments, as student or as teacher. About a year ago ill health impelled him to withdraw from his duties in the surgical professorship.

DR. ALBERT VOGEL, the eminent specialist in diseases of children, died at Munich, on the 9th inst. His well known text-book in pædiatrics was passing into its eleventh German edition at the time of final sickness, and had been honored with repeated translations in foreign lands. His professional reputation had been made at the University of Dorpat, whence he was retired with many distinctions, by the Emperor of Russia, at the end of his twenty years' professorate. This occurred in 1886, when Vogel made haste to return to his native city, Munich, where the welcome given him by the authorities and the medical profession was as warm as his de-

parture from the home of his life-work had been honorable and full of appreciation on the part of his former associates. He was at Munich the centre of many circles of influence, hospitable and social as well as professional, and was much sought after by medical visitors at that University town, and most cordial and generous were the attentions that he was pleased to dispense. He had only a little passed beyond his threescore waymark, when his final sickness occurred.

DR. CHARLES T. BEAN, died at his home, Chelsea, Mass., November 24, æt. 67 years. He was a native of Maine, a graduate of the Medical School, Bowdoin College in 1860, and was the original Lieut.-Colonel of the 24th Maine, a nine months' militia regiment in the early part of the late war. An exchange quotes his weight as being 460 pounds at his death.

DR. RICHARD J. LEVIS, who retired from practice in 1887, died at Kennett, Pa., November 12, of pneumonia, at his home, "Cedarcroft," for years the home of Bayard Taylor. He was born in Philadelphia in 1827, and was the son of Dr. M. M. Levis. He studied medicine at Jefferson College, Philadelphia, and was graduated in 1848. At various periods during his active professional life Dr. Levis was surgeon to the Wills Eye Hospital, the Philadelphia Hospital, the Pennsylvania Hospital, the Jefferson Hospital, and the Philadelphia Polyclinic and College for Graduates. From 1877 to 1887, he occupied the place of president of the board of trustees of Jefferson College. He also served as president of the Medical Society of the State of Pennsylvania in 1885, and as president of the Philadelphia County Medical Society during 1885–1886.

MISCELLANY.

HEALTH IN MICHIGAN.—For the month of November, 1890, compared with the preceding month, the reports indicate that cerebro-spinal meningitis, puerperal fever and inflammation of kidney increased, and that cholera infantum, dysentery, inflammation of brain, diarrhœa, cholera morbus, typhoid fever, pleuritis, measles and whooping-cough decreased in prevalence.

Compared with the preceding month the temperature was much lower, the absolute humidity and the relative humidity were less, the day ozone and the night ozone were considerably less.

Compared with the average for the month of November in the four years 1886–1889, cholera morbus, influenza, inflammation of kidney and scarlet fever were more prevalent, and typho-malarial fever, whooping-cough, dysentery, measles, inflammation of brain, inflammation of bowels, cholera infantum and puerperal fever were less prevalent in November, 1890.

For the month of November, 1890, compared with the average of corresponding months in the four years 1886–1889, the temperature was higher, the absolute humidity and the relative humidity were about the same, the day ozone and the night ozone were less.

Including reports by regular observers and others, diphtheria was reported present in Michigan, in the month of November, 1890, at 65 places, scarlet fever at 68 places, typhoid fever at 50 places, and measles at 23 places.

Reports from all sources show diphtheria reported at 10 places more, scarlet fever at 11 places less, typhoid fever at 46 places less, and measles at 5 places more in the month of November, 1890, than in the preceding month.

LETTERS RECEIVED.

New Orleans Publishing Co., New Orleans, La.; Dr. P. C. Remondino, San Diego, Cal.; Anne Marie Gillett, Paris, France; University of Minnesota, Minneapolis, Minn.; E. A. Birge, Madison, Wis.; Eli Lilly & Co., Dr. C. R. Schaefer, Indianapolis, Ind.; Dr. J. S. Rardin, Portsmouth, O.; Dr. N. S. Craig, Manchester, Iowa; Dr. G. F. Cook, Oxford, O.; Battle & Co., Peacock Chemical Co., Dios Chemical Co., Dr. W. A. Kendall, St. Louis, Mo.; Adolph Chaim, Dr. E. Pynchon, Subscription News Co., Armour & Co., Chicago; Dr. D. S. Lamb, Dr. W. C. Briscoe, Washington, D. C.; Dr. W. D. Hamilton, Columbus, O.; Dr. Wm. W. Keen, Wm. R. Warner & Co., Dr. Frank Woodbury, Dr. B. A. Randall, Dr. A. H. Fracker, Dr. W. B. Atkinson, W. J. Dornam, Philadelphia; Dr. A. Ravogli, Cincinnati, O.; Vogeler, Son & Co., Baltimore, Md.; Beman's General Newspaper Agency, Ann Arbor, Mich.; Dr. Robert Battey, Rome, Ga.; Dr. Paul Paquin, Columbia, Mo.; Dr. E. N. Johnson, Norristown, Pa; Dr. G. W. Hudson, Camden, Ark.; Dr. A. M. Vail, Rock Rapids, Ia; Wm. Davis, Omaha, Neb.; Dr. F. E. Schenck, Harveyville, Kans.; Dr. O. E. Werner, Milwaukee, Wis.; Dr. W. H. Geddings, Aiken, S. C.; C. Remschild, E. Fougera & Co., Lehn & Fink, A. A. Marks, I. Haldenstein, New York City; Dr. F. W. Samuel, Louisville, Ky.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from November 29, 1890, to December 5, 1890.

Capt. William E. Hopkins, Asst. Surgeon, is granted leave of absence for six months. By direction of the Secretary of War. Par. 2. S. O. 278, A. G. O., Washington, November 28, 1890.

Capt. James E. Pilcher, Asst. Surgeon, now on leave of absence, will report in person to the commanding General, Div. of the Atlantic, for temporary duty at Ft. Columbus, New York Harbor, during the absence on leave of Capt. William E. Hopkins, Asst. Surgeon. By direction of the Secretary of War. Par. 3, S. O. 278, A. G. O., Washington, November 18, 1890.

First Lieut. Eugene L. Swift, Asst. Surgeon, is relieved from further duty and station at Ft. McDowell, Ariz. Ter., and assigned to Ft. Thomas, Ariz. Ter., where he is now on temporary duty. By direction of the Secretary of War. Par. 15, S. O. 182, A. G. O., Washington, December 3, 1890.

Official List of Changes in the Medical Corps of the U. S. Navy for the Week Ending December 6, 1890.

Asst. Surgeon L. W. Atlee, ordered to examination preliminary to promotion.

Surgeon H. M. Martin, placed on Retired List December 4, 1890.

Asst. Surgeon A. R. Alfred, ordered to the Naval Hospital, Norfolk, Va.

Asst. Surgeon J. M. Whitfield, from hospital, Norfolk, and to the U. S. S. "Chicago."

Asst. Surgeon A. M. D. McCormick, detached from U. S. S. "Chicago," and wait orders.

Asst. Surgeon J. F. Keeney, ordered to the U. S. S. "Minnesota."

Asst. Surgeon H. N. T. Harris, detached from the U. S. S. "Minnesota," and wait orders.